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ABSTRACT

Three general concerns of the Organisation for Economic Co-operation and Development (OECD) examiners in preparing this first review of Iceland's educational system were that: (1) education contribute to the broader social and economic culture; (2) it differentiate itself from the educational forms of other countries in response to Iceland's particular economic needs and cultural aspirations; and (3) it give attention to the practical issues involved, such as teacher training and salaries, school structures, support for innovation in the schools, and the university. The examiners visited Iceland from February 15 to March 1, 1986, and a brief introduction acknowledges how greatly the preparation for this visit was helped by a background report prepared by the officers of the Icelandic Ministry of Culture and Education. Part 1, the report of the examiners, includes sections on: (1) Icelandic education, culture, and economy in general; (2) early schooling; (3) upper secondary education; (4) teacher training and the teaching profession; (5) the University of Iceland; and (6) administration, funding, planning, and the community. Part 2 outlines the presentation of the examiner's report to the review committee. Part 3 contains the summary of the background report which was prepared by Iceland's Ministry of Culture and Education to aid the examiners in their work. (SM)

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REVIEWS OF NATIONAL POLICIES FOR EDUCATION

ICELAND

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

Pursuant to article 1 of the Convention signed in Paris on 14th December, 1960, and which came into force on 30th September, 1961, the Organisation for Economic Co-operation and Development (OECD) shall promote policies designed:

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Iceland's education authorities have participated in the great majority of the studies and other activities carried out by the OECD's programmes in the field of education. However, this report covers the first OECD review of the country's education system as a whole.

The team of examiners, that included one member fluent in the Icelandic language, the only pre-medieval language in use in a modern European country, considered it of great importance to view Iceland's education system under the conditions normal to its social and economic life. Furthermore, they related their observations and interpretations of education to the country's unique history as well as to its economy and culture today.

Iceland's economy now produces a living standard among the highest in OECD countries, but it is characterised by the fragility of the economies of small countries in which the main margin of success involves the export of one product, in this case fish. There is thus an underlying concern in this review that education should be prepared to make a major contribution to the adaptation and diversification urgently needed to meet this economic situation.

However, the examiners also gave close attention to Icelandic history that provides the context for education's possible contributions to the economy and to other aspects of society. Described until recently as a poor, literally medieval, rural economy, geographically isolated in the northern seas, Iceland's very survival since the 10th century has been a major accomplishment among nations. The replacement of a survival economy by the organisation of an economy yielding one of the world's highest per capita incomes is recognised to be closely related to the underlying cultural strengths of this nation of less than a quarter million people.

Thus, a review of Icelandic education called for direct attention to the contemporary and historic culture of the country. The Icelandic people have had virtually universal literacy for a thousand years, and until quite recently the home was the main school, from where at the same time the young very early in life entered the world of work. This means that despite the importance in Western culture of Iceland's ancient literature, its school system is perhaps the newest in the modern world. To cite relevant figures, in 1950 there were 1 500 pupils in secondary school; in 1984, 15 000. Three hundred university-level students in 1950 have grown to 4 500 at the University of Iceland plus 2 000 more overseas. Thus, with the notable exception of the early work experience – along with school attendance – of most youngsters (age 13 to 14), Iceland has managed in this short period of time to create an education system that has most of the features recognisable in modern countries.

These facts raised three general concerns for this review. First, that education not lose touch with, and in fact contribute to, the wider social and economic culture. Second, that it increasingly differentiate itself from the educational forms of other countries in response to Iceland's particular economic needs and cultural aspirations. Third, that it give attention to the practical issues involved, such as teacher training and salaries, school structures, support for innovation in the schools and the university, to mention only a few.

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Part One

THE EXAMINERS' REPORT

Introduction

At the invitation of the Icelandic authorities the examiners, accompanied by a representative from the Secretariat (Mr. B. Hayward), visited Iceland from 15th February to the 1st March 1986. Our preparation for this visit was facilitated by the excellent and informative Background Report prepared by officers in the Ministry of Culture and Education, a summary of which is included as Part Three.

The detail and openness of this Background Report made it possible to enter almost immediately into penetrating conversations with a wide range of official and non-official Icelanders related to education. However, we particularly have to mention being received by the President of Iceland, Mrs. Vigdis Finnbogadottir, herself a former teacher of French, as well as by the Minister of Culture and Education, Mr. Sverrir Hermannsson. Our itinerary included representative schools, the University, other related agencies and institutions in Reykjavik, and schools in five villages and surrounding rural areas at Egilsstaoðir in Eastern Iceland.

Iceland is territorially large and has much the same distribution of institutions, involving complex issues of the economy, schooling and culture, as any nation many times its population. Furthermore, Icelanders have taken the occasion of this review for a serious assessment of their own position at this juncture of the country's history. We find that the issues in Icelandic education are much like those to be found elsewhere, except that size and historical circumstances may allow these issues to emerge with a clarity that may be particularly informative. Therefore, and in tune with the serious purpose for this review established by the Icelandic authorities themselves, we attempt in the following report to offer, more than usual, specific observations and recommendations.

We hope that our efforts here adequately reflect our deep appreciation of Iceland, of its educational and cultural institutions and of all of the courtesies shown to us during our visit.

The examiners:

Joaquin Arango Vila-Belda
Anthony Faulkes
Thomas Robinson

I

THE GENERAL PICTURE: EDUCATION, CULTURE AND THE ECONOMY

Iceland is a country of outstanding natural beauty and of exceptional historical and cultural interest. The continued existence of the former is largely the result of the fact that Iceland has always been sparsely populated, and the presence of man has affected the landscape but little in most places. As for the latter, many people find the Icelandic history and culture of the Middle Ages of particular interest; and yet the fact that in the Middle Ages the foundations were laid for an individual and independent culture of great vitality that persisted in many ways unchanged down to the present century, during which the country and its society have been modernised with extraordinary rapidity, is also one of unique significance. Within a couple of generations Iceland has been transformed from a pre-industrial society to a post-industrial one, and not only has Reykjavik become a small scale but thoroughly modern city, but the rural areas too have changed fundamentally.

Icelanders are profoundly aware of their history and traditional culture of which they are justifiably proud. They are also aware of the impact of rapid modernisation and the new cultural influences of the twentieth century. Icelandic identity will inevitably suffer great changes – indeed has already done so – and a central concern of the present report is to investigate ways in which the education system can help ensure that the changes do not lead to loss of cultural identity. National identity is not preserved by clinging to the past or by raising barriers against innovation, though it can be strengthened by a sense of continuity with the past combined with confidence in the future.

Like other things in Iceland, the education system has over the last decade or so seen extensive development and expansion. From the rather limited provision, in terms of both coverage and variety, earlier this century, there has grown up a complex and ambitious organisation which aims to provide the same sort of service as exists in other developed countries. Educational ideals, too, until fairly recently, were rather crude, and teaching was conceived largely as a matter of transmitting book-learning and enforcing rote-learning. Now, however, there is a large number of educationists, both teachers and administrators, who have very modern and progressive ideas and advocate thoroughly up-to-date methods and attitudes. If this report is often critical of educational achievement in Iceland, it is not from any lack of awareness of or admiration for the progress that has in fact been made with remarkable rapidity and under difficult circumstances. But there is a noticeable and wide gap in some areas between the aims of educational legislation and the actual provision that has turned out to be possible, and between the ideals of the educationists and the actual practice in many institutions. The gap is partly the result of the fact that resources have not been available to provide for reforms, and partly due to the difficulty of persuading teachers to implement the ideals and society to accept them and their implications.

The circumstances in Iceland are in many crucial respects quite different from those in other developed countries, and these circumstances mean that its educational history and problems are also different. Geographically it is larger than either Portugal or Ireland (103 000 sq. km), while it has the smallest population of any of the OECD countries (241 000, fewer than Luxembourg). The density of the population is thus lower than in any other OECD country except Australia (both have approximately 2 inhabitants per sq. km). Until this century the vast majority of the population lived in scattered farms raising livestock, principally sheep. This century has seen the development of, first, a fishing industry, and more recently other industries, and now about half of the total population live in Reykjavik and its vicinity, while 88.6 per cent live in communities of more than 300 inhabitants. There are considerable numbers, however, living in scattered settlements round the coast and on more or less isolated farms, and while there has been a considerable tendency to migrate to the towns, particularly Reykjavik, this seems to have slowed down recently, and educational provision for the outlying districts is going to be required for the foreseeable future. Ensuring that there are equal opportunities for education and that it is of equal standard throughout the country is a major problem. Although communications have improved greatly over the last two decades, travel in winter can sometimes be difficult or impossible, even though the climate, mainly because of the Gulf Stream and the proximity of all settlements to the sea, does not suffer from extremes of temperature.

The change of occupations from predominantly agricultural (or pastoral) to industrial and service ones has been rapid; moreover, there has been no large-scale industrial development at all. The swift expansion of the towns has led to problems in housing, but more importantly to problems in provision of public buildings and amenities. The change of lifestyle associated with urbanisation together with increasing influence of foreign attitudes and values had not yet led to significant crime or other problems such as are being experienced in other developed or developing countries, but there is no reason to think that Iceland can remain immune from them. The rapid growth of its economy in the last half-century has resulted in its now being among the wealthiest of the OECD countries in terms of per-capita income, though oddly enough the actual hourly wages for various occupations (including that of teaching) seem to be rather low. In other words, the high level of personal affluence is largely maintained by long working hours, with many people having more than one job. Both the affluence and the long working hours seem to be fairly evenly distributed throughout the population both urban and rural. One result is a greatly diminished amount of contact and influence between parents and children, with very many young children spending much of their day in play-schools or other day-care centres, or having to occupy themselves. This is leading to an increasing "generation gap", and there is a danger that many of the cultural traditions and values of which Icelanders are so rightly proud will not be transmitted to future generations.

Reykjavik itself, and the residential areas around it, pose a particular problem. Although the educational opportunities in the capital are very much greater than in other parts of the country, since in it are found the only University and teacher training institutions, the rapid expansion has led to the development of areas with large populations where, except for the housing itself, other cultural facilities often seem to be inadequate. This situation, common for new urban areas in the world of today, is bound to lead to social problems and lack of direction and purpose, particularly among young people; and it is here that the traditional culture of Iceland is most under threat, in spite of the flourishing of theatre and music and other activities which ensure that the centre itself is a comparatively lively place.

Two aspects in particular of Iceland's history have special relevance to the development of its education system. The country was founded as a Commonwealth in about AD 930, traditionally by Norwegian emigrants protesting at the encroachment on their inherited freedom by the Norwegian monarchy. Although from 1262 to 1944 Iceland was more or less subject to the monarchies first of Norway again, then of Denmark, republican ideals have always been strong, and were a significant element in the long struggle for independence that began in the first half of the nineteenth century. Egalitarianism is still one of the dominant values in Icelandic society, and there are relatively few differences of class and comparatively equal distribution of wealth. There is a high level of commitment to equal opportunities, educationally and in other ways (as, for example, to equality of the sexes). This commitment to egalitarianism, however, also manifests itself in a reluctance to differentiate salaries according to responsibility or achievement, which leads to a lack of incentive to excellence in some professions. The fact that Icelanders are fairly free from snobbery about the relative value of manual and other occupations leads perhaps to an under-valuing of some professions, particularly that of teaching. It is also surprising to find that considerable differences are allowed to continue between the educational provision in rural areas and in the larger towns, and that there is quite lively support for the small number of "private" schools. The actual extent of equality of opportunity for women is also a matter for debate.

The high level of tolerance in all areas of social life, and the generally non-violent nature of the society, may also in part be due to the unusual political history of the country, which has never been closely involved in warfare, and where all political and religious changes have taken place with a minimum of violence and bloodshed.

A second significant aspect of Iceland's history is its traditional culture and high level of literacy. There has been a strong tradition of literature, particularly in narrative, at all periods, though it is acknowledged that the greatest period of achievement was in the Middle Ages, and this tradition continues at a high level today. In contrast to other countries, this literary activity has never been confined to one section of the population, and even now more books are produced and owned in Iceland in proportion to the population than in any other country in the world, even though the actual habit of reading books may now be somewhat on the wane. The level of literacy seems to have been high at all periods from the 12th century onwards, and today is almost 100 per cent. In the past this literacy was achieved by the almost universal practice of children learning to read and write at home, though the Church also played an important part. After the discovery, just before the middle of the eighteenth century, that literacy was in fact in decline in Iceland, formal instructions were given that those in charge of children were to see to it that they were taught to read and write, and the Church was given the duty of overseeing this task. It is a remarkable result of this political decision that by 1800 it seems that illiteracy had been almost eliminated in the country.

The change of lifestyle in this century, however, consequent on the economic revolution and modernisation of all aspects of life, has resulted in the virtual abandonment of this formal home-based education, and the task of teaching children to read and write, and of transmitting to them the culture and values of the civilisation generally, has devolved upon the schools and other public institutions. This is an immense responsibility that should be acknowledged by the community as a whole. It seems reasonable to suggest that this ackowledgement could now take the form of examining whether the community is giving sufficient support to the schools and their teachers on the role which has been thrust upon them by the withdrawal of families and the Church from their primary educational activities. Furthermore, increased support for schooling is likely to involve, first, a new awareness of the role that the family does continue to play – even if this includes recognising both positive and negative aspects – in the education of the young and, second, the development of maximum possible contact and cooperation between the home and the school and between the wider community of business and industry and the school. Developments are taking place in this area, but have not yet gone far in most places. Another way for the country to demonstrate its support for formal schooling is by honouring and rewarding the profession of teaching in a way commensurate with its important role in ensuring the progress of Iceland's civilisation and economy.

There have been other historical influences on education in Iceland that have had less happy consequences, for instance the short academic year, which originated in the need in a rural society to have the school year conform to the agricultural calendar. This traditional work of children has extended into recent times – and it has been customary for young people of 13 to 14 to begin paid work during the long summers, which is widely regarded as of great benefit to their development, as well as to the economy. Since need for farming and fishing labour has greatly diminished, these long summers and the retention of the short school year are becoming difficult to justify. The position is made worse by the fact that the school day is also very short, especially for younger children, partly as a result of difficulties in travelling to schools, but also because many schools work on a shift system. In some rural residential schools younger children attend only one day a week. It seems that there is a general tradition of short hours in education which is bound to result in pupils progressing slowly academically.

As well as its high level of book production and literacy, modern Iceland has an impressively high level of activity and wide participation in other areas of culture which are less traditional and which have a short history in this country. There is extensive patronage, both public and private, for all the arts. Theatre, both professional and amateur, is highly developed and well supported both by government and the community. The fine arts are highly valued and appreciated, as can be seen by the widespread private ownership of original paintings as well as by public support both for galleries and in purchase of works of arts, both paintings and sculpture, for other public places. Music is played in the capital and elsewhere at a high level of competence and large numbers of young people attend music schools. Concern for and interest in all aspects of artistic expression and cultural activity is widespread, and both broadcasting and the press reflect this high level of awareness and interest. Architecture too attracts wide attention, and the recent development of this art in the country is reflected by the varying success of designs for recent public buildings. These aspects of Icelandic culture, like the cultivation of literature, have grown upon the foundation of the integrated community and family life that has historically been such a notable feature of Iceland. But there is a danger in too much satisfaction in this state of affairs. Changes in family life, the increasing tendency for young people to set up in small family establishments to replace the traditional large family units, the fragmentation of society resulting from urbanisation, and the influence of foreign cultures with their greater emphasis on reception rather than participation are all a threat both to the culture and identity of Iceland. It is the schools and institutions of higher learning and research that now have the main responsibility for the preservation and development of Icelandic culture, and that are now the main symbols of Iceland's cultural identity. Complacency about the high level of culture in the country could be very dangerous without careful planning and support for the kind of education that would result in a new general participation in the further development of this culture.

Iceland has never been culturally isolated, in spite of its geographical separation from both the Old and the New World. Intellectual and cultural movements, from Christianity in the 10th century to Modernism in this, have always reached Iceland and influenced it just like every other part of Europe, even if sometimes there has been something of a time-lag. The primary reason why Iceland has nevertheless retained its cultural identity, and a significant factor in its success in achieving political independence, is its language; and the comparative conservatism of the language has also been important in the historical feeling of continuity with the past and security in identity in spite of the small size of the population and the often modest character of the country's man-made structures. The Icelandic language is also, however, both a barrier and a liability. Foreigners find it difficult to learn and there is no country outside Iceland where it is understood, though communication of a sort seems to be possible in the Faroes and parts of Norway. The Icelanders therefore need to learn foreign languages in the schools, and those that are mostly taught are Danish and English. This is a heavy liability on the school curriculum, and a disproportionate amount of time seems to be used in the study of language (including Icelandic) to the disadvantage of other subjects which are essential for success in the modern world. The limited success of this great language teaching enterprise is illustrated by the fact that in spite of the high level of Icelandic literary activity, about half the numerous works of literature published in Iceland each year are translations of foreign works. These circumstances seem to point, in this case, to a priority need for research and development aimed at increasing the efficiency of language teaching in Iceland, a problem still at the frontiers of educational practice everywhere.

Another problem for Iceland of a different order is that the small size of the population means that though publication of books for the general reading public is clearly profitable, the provision of textbooks for the wide variety of subjects that need to be taught in the schools and University in the Icelandic language is not. In spite of the valuable work being done by the official National Centre for Educational Materials, there is a serious lack of such materials at all levels, but particularly in the upper secondary schools and higher education. This brings us back to the first problem, that at these levels extensive use has to be made of materials in other languages that many students find difficult in spite of the time spent learning foreign languages in the lower schools.

The foreign countries with which Iceland has the closest political and cultural links are those of Scandinavia. This is natural, considering the developed awareness of the nation's Scandinavian origins and its political dependence on Norway and Denmark in earlier centuries. Scandinavianism is part of Iceland's historical identity, and Iceland continues to participate in the development of the political, cultural and economic future of the group of Scandinavian countries, none of them large, that also faces the challenge of defining their role in the larger world. Thus, Iceland faces a double foreign language problem. Its Scandinavian participation requires communication in a modern Scandinavian tongue (Danish leads here), since Icelandic is an ancient language virtually unchanged since the 10th Century and no longer understood outside Iceland. However, participation in the rest of the modern world requires textbooks and other materials in a vast number of subjects that are mostly and in greatest variety available in English.

Whatever the countries with which Iceland in the future will have the closest links, commmunication with the outside world is bound to continue and increase. The cultural influence of foreign countries will extend, not least as the result of new forms of communication media. Naturally, this leads to some anxiety and insecurity about the future, though Iceland is less inclined now than earlier this century to take an isolationist stance. There is little pressure for any form of censorship or official barrier to outside influences even when these are seen as threatening. It is acknowledged that the threat is not just from the outside, it is one of internal weakness. Identity does not depend on building walls around a country, but on interior strength which is able to cope with and absorb influences from outside. Iceland has always done this in the past with great success, and has always had great openness to new ideas and developments. The ability to absorb these without being swamped by them depends on a high development of awareness and understanding of one's own identity and that of others. This can only be achieved by education for a rapidly changing future and adaptability based on intellectual strength and knowledge. Educational institutions have a crucial role to play in developing awareness and understanding of the complexities of the world in the generations which will have to cope with its future problems.

The development in this century of a wide range of public educational and cultural institutions in a country that has always had a high level of literary culture maintained by community participation suggests the danger of a dichotomy developing between the official, institutional culture and a popular one. There are signs of this having happened in the case of the attitudes to the medieval saga literature held by, for instance, academics as opposed to those held by lay people. More recently, a popular culture is being heavily influenced by foreign culture, particularly American, so that there seems to be a danger of this younger generation rejecting a large part of traditional Icelandic culture entirely. There would then be the odd phenomenon of the traditional native culture being perhaps defended by the academics (in spite of their anti-populist view of it) against an international popular culture hostile both to academicism and tradition. With its strong tradition of resistance to class distinctions and social stratification, there is less sign in Iceland than elsewhere of an opposition between intellectual "high" culture and popular taste. But it is a question to what extent Icelandic culture in its institutional manifestations – the University, museums, theatres, schools – represents the "real" Iceland as it is perceived both by the Icelandic public generally and by foreigners. There is a certain artificiality about the official culture with its emphasis on a vanished past, the understanding of which is often rather romantic. The new culture of the younger generation may be less traditional and inward-looking, but it is no less distinctively Icelandic. The schools and other institutions must not be seen as hostile to the new Iceland, they must co-operate with it.

The strong tradition in Iceland of the autodidact scholar, exemplified by figures like Björn of Skarðsá in the seventeenth century, and lasting until this one, has led to a feeling among some circles of distrust of institutional learning and of professional scholarship. It is often pointed out that still many of the most cultured and learned people in Iceland have had little formal education. But society has changed, and this is unlikely to be so in the future. Iceland cannot afford to undervalue formal education now, for soon it is likely to be the only kind there is. Education for the future cannot be left to chance. Informal culture will not be sufficient for the modern competitive world where professionalism is at such a premium, and the self-educated are vulnerable to the plausible propaganda of power-seekers. Formal support is needed for the defence both of personal and national identity, and a strong public policy is needed to guide its development.

Iceland, with its small population and despite its comparatively simple social structure, can be seen as a microcosm of the economic situation in the world at large, and particularly as a paradigm of the situation of the small nation among giants. But there are special problems associated with small size which for Iceland are of a different order even from those of other small nations. The economic viability of such a small unit, especially when there are few natural resources and when there is heavy reliance upon just one major industry (fishing), and that of parts of the country, for instance the smaller villages and the outlying farms, is still in question. There can be no doubt that the economic viability of the villages and farms is closely related to the educational provision for the young people in them, and that the economic future of the country as a whole is dependent on the product of its education system, as regards its supply both of people with technical and other skills and of educated, imaginative, and adaptable managers and governors. The future of Iceland, even more than that of other nations, depends upon its schools and institutes of learning.

The economic prosperity and cultural prosperity of a country are closely intertwined.

Obviously culture costs money and, to flourish, depends upon economic prosperity. But equally, economic prosperity must have a firm base in a healthy culture that includes not only its manifest artifacts, but people characterised by adaptability in skills and understanding, who have the vision and imagination to discover how to maintain and develop the economy in a rapidly changing world. Iceland has few new natural resources to ensure its economic prosperity. It is more important for it to invest in its education for the future. Its role in the future will be determined by its educated people.

The economy

The economic context for education in Iceland today can be only briefly stated here. Iceland's economy now produces a high standard of living but shares the fragility of the economies of small countries in which the critical sector involves the export of a single product – in this case exploiting the main local resource, fish in the Icelandic seas. The contribution of this industry is subject to major factors beyond Icelandic control – the size of the annual catch and the world price of fish. Confronting this precarious dependency, Iceland's strategy has been to diversify its economy based on its second natural resource – underground thermal pools and water-power. The initial development of these enormous energy sources has required large capital borrowing, and the following energy-intensive industries (aluminium, ferrosilicon) represent large foreign investments.

The programme of high investment that this strategy entails, when coupled with the maintenance of high living standards, has largely contributed to high inflation and increasing indebtedness. The *OECD Economic Survey* reports that "Up to the end of the 1970s the Icelandic economy was able to operate in a high inflation environment without major detrimental impact on real growth and living standards"[1].

However, the 1980s have seen a serious deterioration in the economic conditions that made such policy possible. The *OECD Economic Survey* for Iceland continues: "The fishing sector – on which the country is still heavily reliant – is faced with serious structural difficulties; foreign indebtedness is very high [60 per cent of GNP, the second highest among OECD countries] and real interest rates have now become substantially positive; the current external balance runs a large deficit; price and wage increases have re-accelerated. In such circumstances, there is no realistic alternative to pursuing with greater determination the anti-inflationary strategy embarked upon by the authorities since mid-1983. Chances of success will not only depend on the appropriateness and credibility of policies but also on better acceptance by all the parties involved of the necessary costs of stabilization policies"[2].

What do such stabilisation policies mean for education? Iceland has little choice but to continue substantial investment in diversifying its economy and, therefore, to adopt counter-inflationary measures that involve tighter fiscal policy. According to the OECD: "Although a precise assessment of the overall fiscal stance is made difficult by the lack of consolidated public sector accounts, it is quite clear that the public sector's claims on resources remain excessive"[3].

Furthermore, the character of the economic change now charted for Iceland – structured changes in the traditional industries, the development of service trade, careful economic management and resource allocation[4] – all obviously depend on raising the qualities of both labour and management. If the idea is accepted that schools have an important impact – not always positive – on the workforce, then the level of investment in the schools, and the educational outcomes of that investment, become major issues in a strategy of economic development, and particularly the applications of fiscal restraint. This review will, in effect, be dealing with detailed aspects of these issues.

Major structural changes and education

These major issues for Icelandic education are not easily grasped and may be further clarified by emphasizing the structural changes and features that we have already noted in contemporary Icelandic society. In summary, the first of these involves population growth and location. More than trebled in this century, the additional population is almost entirely urban, half living in the largely new metropolitan area of Reykjavik, but the remaining half continuing to live in villages – many containing only a few hundred people – and in rural areas – some still quite remote. The second structural change is the decline or stagnation in the demand for labour in the traditional sectors of farming and fishing, accompanied by a corresponding rise in the service sectors[5]. Third, the structure of the labour market allows for a large part of the labour force to hold more than one job. Fourth, a large proportion of women, particulary those with children, have joined the labour force, diminishing parental presence in the home at a time when families less often include grandparents or other family members. These changes as a whole have contributed to a significant, regressive change, the sharp decline or disappearance of the role of the two traditional sources of childhood educational experience, the home and the workplace. Parents have largely given over education to the school, and also, the decline of traditional young people's jobs in the modern economy threatens the tradition that young Icelanders at age 13 or 14 begin to work at least 3-4 months a year – a tradition which formed an important link in their practical and personal education.

Two further broad changes must be recognised: in the structure of participation in Icelandic cultural life and in the rising importance of all kinds of exchanges with the outside world. An almost universal participation in a relatively narrow literary culture – everyone learned to read from a relatively small number of books[6] – has given way to growth in many fields but also to segmentation between consumers and specialist performers, between age and social groups, etc. Iceland's ancient language is central to its unique culture and identity; now the needs of modern Iceland require widespread mastery of world languages and scientific vocabularies.

How have Iceland's authorities responded to these structural changes? Largely by creating a modern school system, but one that generally mirrors the systems of other modern countries and the scale of resources available from their far larger populations and economies and that, therefore, at some points, appears to be only marginally relevant to Iceland. For example, it includes such features as age-grade class organisation, curriculum specialisation and teacher behaviours structured for the far larger populations of these other countries, when, in Iceland classes of a dozen pupils and schools of a hundred are not uncommon. What are the actual needs and opportunities for education that arise from specific features of Icelandic society today? What problems do they generate? What are the measures necessary to reconstitute and broaden participation in education of the young and in cultural life; to develop mixed age classroom techniques; to deal with issues involved in teachers and professors doubling up in their jobs, etc.?

Thus, the implications of these structural features of Icelandic society will provide reference points throughout our review of various sectors and aspects of Icelandic education. We hope to raise questions about whether Icelanders might not consider more closely such features as the basis for educational planning and development, making it at the same time more expressly Icelandic and more universally effective and modern.

NOTES AND REFERENCES

1. *OECD Economic Surveys: Iceland*, OECD, Paris, May 1985, p. 48.
2. *Ibid.* pp. 48-49.
3. *Ibid.* p. 47.
4. *Ibid.* p. 47.
5. Icelandic authorities point out, however, that the workplace still provides a source of childhood education.
6. Vidalin's Book of Sermons and the Law Book were frequently used, and to a lesser extent the Bible.

II

EARLY SCHOOLING

Pre-school institutions

Compulsory education in Iceland is from the age of 7 to 16 (the addition of the ninth year was implemented only in 1985. In addition, most schools provide classes for 6-year-olds, and some for 5-year-olds, and the majority of Icelandic children (nearly 92 per cent) attend school for at least a year before they enter the compulsory system. In most areas there are also day-care centres for younger children which are heavily used by the large number of families where both parents work, sometimes for long hours.

While the physical needs of young children seem to be well taken care of in these institutions, their educational role in preparing children for the first year of compulsory education seems not to be clearly defined, though some of them are nevertheless doing excellent work. Some pre-school classes are staffed by teachers with normal training, and there is a danger that they may be ill-equipped for teaching very young children and unaware of their real needs. There is an excellent course of training provided for pre-school teachers in the School for Nursery Teachers in Reykjavik, though the instruction at this school is only at the Grammar School level, not at university level. Nevertheless, successful students from this school would have in many cases a better idea of the needs of young children, and be better able to provide a suitable environment for their concept-development, language-development and activity preparatory to school reading and number work than conventionally trained teachers. Enrolment at this training school is not high enough to provide sufficient numbers of staff for all day-care centre and pre-school classes, and there is a widespread shortage of trained staff in pre-school institutions. Consideration should be given to a higher valuation of the role and importance of nursery teachers, and wider use could be made of their skills. This is of particular importance in a society where many parents are too occupied in their work to provide their children with the traditional home-based education and attention that they need in the early years. If the long hours spent by some young children in day-care centres are a necessary evil, then well-trained and imaginative teachers are all the more important. Toward this end moves could be made to reward nursery school teachers, giving them the same status as other school teachers, and pre-school institutions could be better integrated with primary schools.

Compulsory schools (age 7 to 16)

It is only for the compulsory years of schooling that proper policies and syllabuses exist. The compulsory schools are all organised on comprehensive lines, and streaming is not practised. The proportion of time to be spent on each subject is largely laid down in the regulations, which perhaps leads to some restriction on experimentation and development of the curriculum. The University College of Education sends out a number of teachers with imaginative and up-to-date ideas on methods of teaching and progressive attitudes to education, and some schools have implemented such methods or experimented with them with pleasing results, but the examiners' school visits corroborated reports that generally modern ideas are penetrating the schools only slowly and in many places teaching would be called old-fashioned and unimaginative.

With respect to this issue, namely the development of innovation and modern approaches to teaching, a programme begun in 1970 for integrating History and Geography and other subjects into a Social Studies programme for the first nine years of schooling, deserves particular notice[1]. This programme represents a major innovative effort on the part of education authorities during the past 15 years. It seems to have been generally imaginative and progressive, in that it not only introduced a new subject-matter into the existing rather traditional teaching of History and Geography, but encouraged or even demanded new teaching techniques and new attitudes to learning on the part of both teachers and pupils, being concerned not so much with the transfer of information as with developing mature attitudes and values. It provided pupils not only with interesting material on the basis of which to assess their own position and importance in the world, but with new ways of learning, by project work and exploration and independent enquiry. This programme would have been not only more effective pedagogically, but more successful in letting children develop a true sense of their own identity as Icelanders through intelligent study of other cultures. The programme began in 1970 and was developed slowly due to the immense task undertaken to revise and integrate the study of social subjects throughout the nine grades of compulsory school and because of limited resources. The curriculum and materials had been completed for about half the project when it was interrupted, and it is now under review.

Without going into the details of the Social Sciences programme or the nature of criticisms raised, it seems possible to make some useful observations. First, this kind of ambitious innovation involves new, perhaps greater, demands on teachers, great changes in their understanding and in their behaviours throughout the whole nine years of compulsory school. Such a programme, therefore, seems to require not just the development of its curricula content by central authorities but also a high level of participation by numbers of teachers and a broad effort at teacher re-education – and, even, explanation and discussion of the programme beyond the school in the community. Second, the programme under question here, and all the resources invested in it seem in danger of being abandoned before it has been given sufficient trial, even though more than a dozen years have gone into its development. Has the pace been too slow to be effective and can the factors involved be corrected? A third consideration may be most important. A failure to examine and deal with the issues involved in this programme may greatly inhibit further efforts to innovate in Iceland's schools – the introduction of new topics, the adoption of modern and progressive methods of teaching, etc.

Many school buildings are pleasant and well-designed in themselves, and seem to have good facilities, but in a number of areas they are too few and too small. Many schools find it necessary to operate on a shift system which limits the school day to four hours for each pupil, and this seems insufficient, especially given the late age at which compulsory schooling begins and the short school year. The double use of classrooms is also inconvenient, and the tendency of some staff to teach both shifts results in an unacceptably long teaching day. Priority should be given to providing a full day's schooling day for all children, with adequate accommodation and staffing. Many schools, particularly in the country areas, lack facilities for physical education.

Rural schools

There are particular problems in providing an education service in rural areas due, first, to the thinly-spread population and, second, to the great shortage of trained teachers. Some rural day schools are very small, and in some cases (13 in number) with fewer than ten pupils; mixed age-group teaching is thus inevitable. There are advantages to this way of teaching, however, as has been shown in the experiments carried out in Iceland and elsewhere. It is, moreover, understandable that those living in rural areas should wish to keep their local schools as long as possible, both so that their children will not need to travel long distances to school and as a focus for the local scattered community itself. It gives an opportunity for fostering links between school and home and for parent participation in their children's education which distant schools inhibit. In spite of the problems of providing tuition in all areas of the curriculum and a fully trained staff in rural schools, they probably must be continued.

Some residential schools (34 in number) are provided where distance and communications make daily travel impossible. Some of these schools face the particular problem that the buildings were designed to serve also as hotels during the summer months. If the schools visited by the examiners were representative, the buildings and settings of such schools are often very pleasant, but they also have important deficiencies as schools. First, of course, the transfer to the hotel function each year is quite inconvenient. Then, also, the kind of recreational space and facilities required for children were completely lacking. These shortcomings emphasized the burden on the teaching staff that must provide care for their pupils out of school hours and at night, so that they are in charge of their pupils 24 hours a day, moreover without having any special training for this function. The staff in these schools are evidently doing the best they can in very adverse conditions. However, the picture that emerged was that despite the small enrolment in such schools and, therefore, high per pupil costs, these schools suffer from under-qualified teachers, teacher turnover and a short-fall in accommodation, facilities and financing.

We can note that the role of house-mother and -father is quite different, and requires quite different training, from that of teacher. The two functions of course can be combined in the same person and in the same institution, and with effort bring striking benefits to education. However, besides adequate facilities we would like to emphasize the need for training and external support, and sufficient staff to make the conditions of work (hours) conducive to the retention of qualified teachers in these jobs. We will come back to other aspects of this problem in considering residential schools for the older youth.

There may be a diminishing need for residential schools – nearly half the pupils who attend them are doing so on a daily basis anyway – so that residential provision is made for not more than 1 000 pupils in all. The trouble is that the lack of educational provision for the scattered farming areas is one reason for families abandoning them. Further reduction of the accessibility of schools would only accelerate the depopulation of rural areas and the abandonment of the traditional rural way of life. On the other hand, it is partly the opportunities provided by improved educational facilities that lead young people to migrate to the towns anyway. But while there is still a need for residential schools, and they must continue to be provided, they ought to be provided at a proper standard, and not one so noticeably inferior to those in urban areas.

As well as having a rather short school day, many rural schools only operate for eight months a year, or even in some cases seven months (of the 210 compulsory schools only 63 actually have teaching for the full 9 months, though these 63 schools do contain two-thirds of the total number of pupils). This is historically a result of the need in agricultural communities for additional labour on farms in the summer months, which children and young people traditionally supplied. Since this need is diminishing, it may be that the shorter year in rural schools is no longer justified, and that it might magnify the inequality of educational provision between the country and the towns which results from other factors. It is clear that many people both in the schools and the community favour the present flexible organisation and believe that work experience in the summer is valuable for young people and that their labour is still to a large extent useful and necessary. If this is true it ought to apply equally to the towns. Such a great difference between the provision of education in different areas of the country is hard to justify and seems bound to operate to the disadvantage of the rural population.

Shortage of trained teachers is a widespread problem in the rural areas, but there is said to be a particular shortage of specialists in certain fields, such as physical and special education, and music, art and crafts.

Special education

Special schools provide a high level of care and appropriate education for those with various kinds of handicaps. The methods and facilities seem up-to-date and progressive. There is a good level of involvement of parents in the activities of these schools. It is the policy now for as many as possible of the less severely handicapped to be integrated into ordinary schools, which already have mixed-ability classes. This integration is being aided by the provision of training for teachers in the teaching of children with special educational needs at the University College of Education, and it is hoped that as many teachers as possible will receive such training. It is clear that in these areas there is a great awareness of developments in other advanced countries and great receptivity to new ideas and methods.

About 20 per cent of all children are reckoned to have special educational needs, and these are generally met within the ordinary schools. Psychiatric services and remedial teaching are generally well provided for by the regional education offices, though it is reported that there are insufficient psychiatrists and other specialists to fulfil these needs.

Teaching materials

Teaching materials present a special problem in Iceland because of the small population and the distinct language. All materials, at any rate for the lower schools, need to be in the Icelandic language, and foreign materials can only be used if they are first translated. Printing is expensive and unprofitable for the small number (compared to other countries) of copies required. Frequent updating of materials is difficult. In larger countries, of course, publication of standard textbooks is very profitable, and in some publishing houses actually subsidises other kinds of publishing. In Iceland, where there is such a high level of publishing of non-academic books, which is evidently a very profitable business, there is almost no commercial publishing of school books at all.

Teaching materials for the compulsory schools are now supplied for Iceland by the National Centre for Educational Materials in Reykjavik, which also provides the only teachers centre in the country at present, though there are plans to open other centres in other areas. The Centre has produced a large number of valuable books and teaching aids for the compulsory schools, though it does not provide generally for other parts of the education system. Like most other educational institutions in Iceland it suffers from a shortage of both funding and manpower, and would be able to provide an even better service if these were improved. But though good new materials are available in the Centre, as well as help and advice about the implementation of new methods and approaches, many of these are slow in reaching the schools. This is due in part to the schools' lack of resources, their distance from the Centre, and the unwillingness or inability of many teachers to make full use of what is provided.

Books and materials are provided free for pupils in the compulsory schools; they are mostly bought by the schools from the Centre for Educational Materials, so that what is available depends on what is given individual schools for this purpose by the State and local authorities. In the past, books thus provided were regarded as the property of the pupils, and new books had to be provided for each new generation of pupils. Now, however, textbooks are regarded as the property of the schools and are passed on from one generation of pupils to the next. This, of course, results in fewer books being bought by schools and further limits the resources of the Centre for Educational Materials, and is a great inhibition against regular revision and updating of materials.

Although Iceland is a small country, it still needs a full range of educational materials and textbooks for its schools, even if it does not need large numbers of copies. If it wants to provide an education comparable to that in other developed countries, it has got to provide materials for all subjects that need to be taught and at all levels. This means that in proportion to its size, far more will need to be spent on production of these materials than in other countries. The materials the Centre is providing are of high quality, but they are coming out at a a rate so slow that the full range of materials the schools need will never be available, since earlier materials need revision before the first version of all that is required is finished. The amount of money available for materials per pupil is perhaps far too small under these circumstances.

Beginnings have been made with providing modern technological equipment in schools. Nowhere did we see evidence that the use of the latter had been defined. A few schools have video equipment and some have recently acquired computers. It is noticeable how far the schools lag behind the homes – it is said that most Icelandic homes now have both videos and a high proportion have computers, while few schools yet have them. If this situation is correctly described, then the problem is raised as to what *would* be the strategic role of computers located in schools. As with books, there is difficulty in finding enough educational material for the new equipment in Icelandic. The Centre for Educational Materials has some films available and is beginning to develop computer software, but there is a long way to go. Those schools that have computers are using them to teach some pupils computing, but other educational uses of computers, e.g. for language work or mathematics, hardly seem to have been envisaged. The only computer we actually saw being used in a school was being used for a game; in another school the principal pointed to four new ones, saying "Now we must decide how to use them!"

Planning and some additional resources might lead to much greater use of new technologies in Iceland's schools. For example, the shortage of textbooks in Icelandic seems to suggest that radio, television and cassettes could supplement them, but the high costs of initial outlays and effective programming must be calculated against the costs of the older technologies such as simply providing the required books.

In some rural schools a library has been developed to serve both the school and the local community. This use of limited resources, even though the requirements of the school may be rather different from those of the public, enlarge the facilities for both kinds of user. Also, it is a way of integrating the school with the community and of involving the community in provision for the school's needs that can only be beneficial for both. The system ought to be more widespread, and could embrace other cultural resources beyond books – such as films, cassettes, computer software – which would be in line with Icelandic traditions.

Curriculum

Although the responsibilty still rests with the Ministry of Education much curriculum development has now passed to the Centre for Educational Materials. Here again the Centre is doing valuable work with inadequate resources.

The curriculum in the compulsory schools has evolved from the particular situation of Iceland and the perceived educational needs of its children. The outline has been laid down by the central authorities and the initiative in curriculum development generally comes from them, though both the directors of studies who used to be responsible for this and the staff at the Centre for Educational Materials who are now responsible for it are, or have been, practising teachers. Although it is clear that curricula are carefully planned with the needs of Icelandic children in mind, examination shows that it differs markedly in the balance of subject areas from what is common in other countries. The crux of this difference is in the large amount of time devoted to language learning, both of the mother tongue and of two foreign languages, which of course limits other areas such as social studies, history beyond Icelandic history, and science.

Recognising the importance of languages for Iceland, the curriculum-makers are faced with a major problem, for which solutions can be sought in a number of directions. For example, it is possible to explore the idea of learning certain subjects (history, science) by making use of a second language, beyond a certain level, thus combining important and interesting subjects with language learning. Also, much work can go into developing more efficient and effective language teaching as such. With some notable exceptions, teaching seems to be concentrated on the acquisition of language skills and comprehension. Teaching of language in many schools still seems to be somewhat old-fashioned in its methods, in spite of the modern materials available, as is the teaching of reading. And, of course, language learning is seldom attached to creative activities of other kinds, comprehension of the physical world and the world of ideas, etc.

The relationship of curriculum problems to school structures can also be noted here. For example, the high enrolment continuing beyond compulsory school might provide an opportunity to stretch out the language courses upwards into secondary school. Then, also, a longer school day or school year might ease pressure on the curriculum.

In spite of the great awareness of modern developments in curriculum and teaching methods at the College of Education, among the central authorities in the Ministry and the Centre for Educational Materials, and the widespread advocacy for them, these methods are slow to be adopted in the schools – methods, for example, that involve encouragement of independent and individual work by pupils and of creative thinking. Some schools have indeed introduced integrated project work, and this seems a valuable and successful development as far as it goes, but even in the examples shown there was little evidence of the encouragement of such self-expression as creative writing. Art and music are widely taught and in some places in an imaginative way, but there are still places where conformity to conventional models and patterns of expression is imposed.

On the evidence of the schools visited, the typical orientation of the teachers is to accept conventional aims or objectives or those imposed from above, rather than defining them for themselves. However, there has been some innovation originating from teachers themselves and much has changed over the last generation. But as indicated earlier, the troubles of the Social Studies project, which seems in itself to have been a bold and imaginative effort, may partly stem from the fact that it was imposed from above on teachers who were ill-equipped in their training and experience to implement it. It is already the policy of the Ministry to give individual schools greater freedom to plan their own curriculum and greater encouragement to innovate and experiment, with appropriate support and advice from the central authorities. However, this policy has not yet been implemented very widely. Apparently, the teachers themselves need to be more involved in its development.

Assessment and evaluation

Yearly examinations have been abandoned in the compulsory schools, and there is now only a national examination at the end of compulsory schooling. The yearly exams have been replaced by a requirement for less formal assessment of individual pupils at every stage during their schooling, but it is very unevenly applied, and often rudimentary. Many educators in Iceland agree that there is a need for careful assessment of children's progress in skills, knowledge, and emotional development, so that their individual needs, and the teaching they are receiving, can be better assessed. Work is being done on this by some individuals but again, implementation in the schools is slow. The ordinary schools could learn much from the methods of the special schools in this respect.

Another generally accepted idea, but also far from implementation, is that the teaching process itself – its content, structural organisation and outcomes in relation to educational objectives – should be the subject of ongoing evaluation. However, here we would suggest, in line with other recommendations, an emphasis on the development of the teachers' role in such evaluation, viewed as a major enhancement of their competence. Of course, methodical programmes of evaluation can be made available for research that can be used to inform educational planners and authorities on the needs of schools, students, families and teachers.

Administration and supervision

The schools are organised and supervised by local School Boards and by the regional offices of education. The schools receive advice and support both from these and from the educational directors in the Ministry, though the staff of the regional offices and of the Department of Educational Development are too few to provide extensive supervision or to visit all schools on a regular basis, particularly in sparsely-populated or extended geographical areas. Consequently many teachers, particularly in small and remote schools, feel isolated and without access to support and advice. The attention of Education Offices is of necessity largely devoted to organisational matters, and the content and day-by-day practice of teaching is given little attention. Voluntary associations and officially organised meetings of teachers do take place and provide some remedy. Thought should be given to the establishment of a regular independent supervisory/advisory service for the support and development of teaching, to ensure that proper teaching standards are maintained and improved and to help teachers to evaluate and develop their teaching to the extent of their potentialities. Without such a service, it is difficult to know what is actually happening in classrooms and to what extent the new ideas and methods being developed by educationists are actually being implemented.

The school and the home

Many people still active in Icelandic society today were taught to read and write at home – as was required by law – before being admitted to school. It is perhaps no incidental observation that an informal but systematic inquiry indicated that this procedure seems to have been pedagogically highly successful. Thus, the primary responsibility for schooling has passed in this century from the family to the schools in Iceland as in many other countries. However, there is an important difference. In other countries education to literacy for most people was historically *initiated* by schools through the children, while in Iceland – almost 100 per cent literate for hundreds of years – it was the responsibility for an *established literacy* that was transferred from family to school.

The significance of this difference is yet to be properly explored, but it corroborates other evidence that initially the Icelandic family and the community did not give up too much to the school – only literacy – and the school made a less serious difference in educational outcomes. The question is inevitably raised: is Icelandic society making an adjustment to the school's changed position that reflects the higher educational demands of a very rapidly modernised economy – an economy, also, that often keeps both parents long hours at work? Thus, discussions in Iceland suggested developments in family and school relationships that are evident in other countries. First, a new recognition of the full weight of the responsibility that now falls upon the schools. Second, efforts to foster the greater contact with parents necessary for schools to fulfill their role. Third, a recapitulation of the fundamental psychological role that families play in their children's education that they cannot devolve to schools.

Of course, parent involvement in schools can take many practical forms. Many schools in Iceland have parent-teacher associations, but by no means all. Thus, this is an obvious point of possible improvement. Consultation evenings for parents and social occasions to which they are invited are held at most schools, but they are only one aspect of possible parental involvement. Parents can be involved more in discussion of the curriculum and other aspects of school organisation, even in the appointment of teachers, as well as in aspects of the children's work (homework and reading practice). Such involvement as there is in schools is mainly with the pre-school classes and compulsory schools: the examiners see no reason to limit parental involvement to the lower school levels.

The relatively high per-capita income of Iceland has been cited as a basis for the suggestion that families could invest directly in their children's education – contributing to books, teaching materials and even facilities. In a society of relatively equal incomes, even including rural areas, this might be practical if it can be managed within the framework of Iceland's commitment to equal educational provision. At present, finance is contributed to upkeep of the schools by local government, and resources by this channel are limited, especially in thinly populated areas with no industry. Would not additional support, made voluntarily when families are sufficiently aroused to concern, be acceptable?

These directions in the recognition of the family and the school educational roles can be fostered by definite policy measures and programmes and can raise greatly the "productivity" of what is actually a joint home and school educational enterprise.

NOTE

1. The social sciences programme is not the only major innovative effort on the part of Icelandic education authorities in the last 15 years. The social sciences programme is only a part of the effort begun in 1966 to revise the teaching material in all subjects at the compulsory stage, to introduce new teaching methods and revise all curricula. The revision of teaching material is finished in all subjects except the social sciences.

III

UPPER SECONDARY EDUCATION

It is at this level of education that Iceland has the least defined formal policy. A law meant to establish such a policy was introduced into the parliament during the 1970s but never enacted. It is, nevertheless, somewhat observed in practice and, therefore, and the rapid increase in upper secondary school enrolment has largely been in line with the policy contained in this law in schools designated as "comprehensive". In order to begin to respond to this situation, we may ask what seem to be the main factors behind it. Our observations briefly stated are these:

The underlying function of secondary school education is to manage the transition of young people to adult life, to enter the workforce or further adult training towards that end, and to begin adult social life. Until recently, of course, this function in Iceland was largely performed by the operation of its less formal social institutions, in traditional young people's work and the family. And this arrangement had resulted in a notably successful, productive culture renowned for its non-violence. In response to the rapid onset of modern society, Iceland looked to other modern societies for ways to formalize this function and the result has been an expansion of secondary schooling. There were only 1 500 secondary school students at the close of World War II; by 1984 there were more than 15 000. Secondary school students increased nearly fifteen times faster than the population (140 to 240 thousand). However, the schools that have been created in the heat of this expansion, while representing an essential advancement, do not yet represent an agreement on what secondary education should be, its objectives and modes. What used to be taken care of with a fair amount of automaticity in the culture must now be newly thought through on complex levels and then specified in terms of types of schools, their structure, programmes, etc. It is no wonder that Iceland's authorities have moved cautiously, not disrupting older schools, like the original Grammar School of Reykjavik, when they seem to function, and not making any final commitment as to policy. However, these authorities now seem to be saying, and examiners would agree, that the time has come when this position will not be sufficient.

Despite what we can read as a clear social consensus in favour of the comprehensive type school, this has not been imposed everywhere. In fact the State continues to support, and even build, traditional grammar schools as well as technical and vocational schools, while the newer comprehensives as the majority form are expected to bring about a kind of spontaneous adjustment between these academic and vocational poles. This expectation has not been fulfilled and this is about where the three types of secondary schools in Iceland now stand.

Judging from the sample of schools we were able to visit, Iceland's secondary schools are pleasant places, small classes, an air of informality, and relaxed, even in the traditional old

Grammar School in Reykjavik, where the headmaster proudly spoke of how hard he drives the teachers and students to academic achievement. This atmosphere may partly reflect the relatively mature ages – 19 and 20 year-olds being a significant proportion – of the students. However, despite differences in style and organisational forms, the differences in the actual content and syllabuses of the comprehensive and grammar schools were not substantial. Funds for the elaborate equipment for vocational subjects have been scarce and for the most part tuition is in the academic subjects with a view to University entrance.

Despite this academic orientation and despite the selectivity involved in a 40 per cent dropout over the 3-year course (out of only 70 per cent of the age group originally entering), 50 per cent of those secondary school graduates who do enter the University fail or leave during the first year. Of course, the fault might be with the way the University handles its freshman students, but this means that a great deal of consultation should take place between the University and the schools, a contact that the schools report as lacking.

Nevertheless, what these figures generally signal is that the upper secondary schools largely seem to miss out in providing the tuition required for the major part of the age group. The traditional vocational schools have been declining in popularity since – in spite of a generally expanding labour market – their graduates are confronting a declining market in the traditional fields, and they report that the better students now go to the comprehensives from which "their options are better". The dominance in the schools of academic preparation for university is illustrated by the fact that the largest of the two commercial high schools, housed in an impressive new building – technically private, but publicly funded – is selective and proud of its record of successful university entrants.

The rather relaxed atmosphere of the secondary schools that we observed went along with the pro-forma quality of their main offerings, putting students through academic courses in preparation for university with little reference either to actual individual student outcomes or to the needs of the Icelandic labour market. Teachers bring their income close to that of skilled labourers by working typically one-third more hours overtime and/or on another job (see Chapter IV on the teaching profession). Only 58 per cent are qualified – even much less in the science and maths fields – and teaching is predominantly lecture-question-answer style. The subjects taught and class organisation follow traditional school patterns so that although student bodies and classes are small, many schools are obliged to work on double shifts. The traditional vocational schools continue to serve their student populations well, with some of them, for example the Arts and Crafts and the Commercial schools, seeming to enjoy a great renaissance. But the outcomes for the major student group going on into upper secondary school seem to fall quite short of the objectives implied by Icelandic values and needs.

Icelandic authorities seem to be aware that improvement in the secondary schools will not be brought about by any single dispensation from any one source. Therefore, it is significant to note that it appeared to the examiners that each secondary school seemed to be a little world in itself with relatively little contact with parents, the community and world of work (the vocational schools might be excepted here), *other* secondary schools and, even, the Ministry. While, of course, this situation tends to result in a local autonomy that is useful in itself, it also means that there is little external reference for the setting of standards (for example, until recently there was no curricula centrally formulated for this school level)[1], for exchange of ideas or for bringing together the schools' or the community's common resources.

The question is then raised, would it not be possible, particularly in the Reykjavik area, to treat the various secondary schools, each with its own advantages, as parts of a working *system* of secondary education? The Ministry seems to have some authority that could be used toward this end. (For example, the Ministry appoints all teachers directly.) Could there be some way, for example, for some of the offerings of the vocational schools to be made available more broadly? Could the well-endowed commercial school, now beautifully housed in a new commercial centre, take some lead in extending its expertise into other schools? Perhaps a centre for computing and other advanced technological work could be established in some place, tapping the help of the relevant industries. Of course, relevant parts of the community should be included in the system, meaning the establishment of real working links between the schools, students and teachers and a wide range of industries and, even, governmental departments. Furthermore, the University should not be excused from its responsibility to contribute directly to the educational environment of secondary students.

Bringing an increasing level of upper secondary school participation to the country-side of course remains a problem. The perspective of strengthening upper secondary education by seeing it as a whole, implies adjustment to the reality that other areas are not likely to have the variety of opportunities that can be offered in the metropolitan community of Reykjavik. Nevertheless, our visit to outlying towns, fishing villages and the rural area of eastern Iceland[2] suggested that Icelanders are wrestling with the need to envisage their social and economic future and to use educational development as a major means towards reaching their future.

This is a formidable task at its early stages of accomplishment. For upper secondary schools this seems to imply some need to gather the available student group from the surrounding region into residential schools. The partly-built school at Egilsstaoðir promises to be an impressive accomplishment, whenever completed. However, this particular school represented an issue that is likely to appear elsewhere in such schools. The issue is to differentiate clearly between the tasks involved in establishing and maintaining the social environment of young people where they live beyond school hours and the tasks of the learning/teaching process in the school setting. We have earlier referred to the lower school residential schools that require this differentiation, but it is even more emphatically needed in a residential school dealing with a mixed, 16 to 20 year-old student body. Taking residential and social responsibility for such a group is a complex assignment that warrants special professional preparation, and certainly should not fall to teachers with a full teaching load. Setting up a framework for a healthy social life in dormitories, providing necessary counselling, etc., should be in the hands of professionals trained for this kind of role. Otherwise, these kinds of concerns either swallow up the time and attention of some teachers, or they are left neglected to chance. Also, to facilitate this differentiation, student living quarters should be on a site well separated from classroom facilities, as was originally planned for this school.

Of course, all such considerations imply that operating such residential schools will be costly. But perhaps this is exactly what must be confronted in order to really bring effective upper secondary schooling to rural areas.

Adult education

Adult education below University level is provided by some grammar schools and by the Adult Education Institutes. These are providing a useful service both for those who for one reason or another have not achieved desired results in ordinary schools and also for those wishing to extend their education into new fields in which the schools do not normally provide instruction. The provision could be greatly extended, however, both for re-education for those who wish or need to change occupation and to encourage leisure pursuits. The possibilities of radio, television, cassettes and computers are only beginning to be explored and might particularly extend such education to the remote parts of Iceland. Discussions have also begun on the possibility of providing university level education by these methods. This kind of extension of opportunity for those whose employment or place of residence are obstacles to higher education, would represent, as noted elsewhere in this report, a significant new initiative of the University within the Icelandic community.

NOTES

1. A draft curriculum for the upper secondary schools has now been issued.
2. Towns and villages visited were: Egilsstaoðir, Royoarfjöroður, Eskifjöroður, Neskaupstaoður, Hallormsstaoður.

IV

TEACHER TRAINING AND THE TEACHING PROFESSION

Training for teachers in the compulsory schools is provided in the University College of Education in Reykjavik, which now has university status. Courses are given in educational theory, with an emphasis on educational psychology, on curriculum studies, special subjects, and on practical work. Teachers in higher schools generally have university degrees and follow a post-graduate course in education at the University of Iceland. The latter provides courses in educational theory and psychology but little in the way of instruction in teaching methods and curriculum studies. It is widely felt that this course is too little directed towards the practice of teaching.

In some subjects teachers are trained in other institutions. In art, crafts, and music they are trained at the Art College and the Academy of Music. Nursery teachers and teachers of Physical Education are trained at the Nursery Teachers School and the Physical Training College. These courses are not at University level, and it should be considered whether they should not be raised to that level so that all qualified teachers have degrees and all the same status, a change that would be in line both with modern pedagogical thinking and with actual Icelandic policy. The provisions of the law on primary education lay equal stress on academic and non-academic subjects, and on mental, physical and social development. This policy suggests the need for cohesive teacher training that ensures that all teachers throughout the school system, teaching pupils from the age of 3 to 20 in all subjects, have equivalent training and education. In general, effective teachers are those who have their own education developed to the highest level possible, while at the same time receiving appropriate theoretical and practical instruction in pedagogy.

The course at the University College of Education is of three years' duration. Proposals have been made that this should be extended to four years. Implementing this proposal would not only allow for improved teacher training – theory, special subjects and teaching practice, are the cited needs – but also would facilitate the further consolidation or reorganisation in this field towards the end of eliminating the vestiges of two separate courses and levels, in the College and the University, for teacher training. Some cooperation between the College and the University of Iceland already takes place, but there is scope for much more. For example, it might be advantageous to concentrate the study of educational theory and psychology and of methodology and curriculum studies in the College and for all students of education to follow courses in their special field of study in the University, and thus avoid unnecessary duplication of courses. University students might benefit from the expertise of the College in methodology, reversing the long-standing but incorrect assumption that teachers at the upper school levels need less understanding of developmental psychology and of teaching methods.

Educational research, which is greatly in need of further development, might also benefit from greater cooperation between the two institutions and from more coordination.

In association with the College of Education there is an Experimental Primary School. There innovations and experiments in teaching methods are tried out, the initiative for them coming from the teachers themselves. It is obviously very valuable to have such work going on close to the College, and even closer integration with the work of the College would be advantageous, so that students could see ideas and theories being put into practice as they learn about them, with opportunity for proper evaluation and perhaps some project work in association with the school. More frequent contacts with the school, with regular visits for observation might be of great benefit to the students of education, who might then see what an exciting and rewarding atmosphere can be generated in a school when teachers are actively engaged in introducing new methods and approaches. The College might ultimately consider establishing regular contact with other innovative schools and classrooms as they arise.

Many OECD country education authorities have concluded that the key to the professional development of teachers is recurrent in-service training. It can also be a second avenue for recruiting talented people who, as in the case of Iceland, begin teaching as under-qualified personnel filling in the teacher need at a time of shortage. The College of Education in Reykjavik provides some in-service training, mainly short courses in summer vacations. Furthermore, an ambitious BA course for already qualified and experienced teachers is being developed. Originally aimed at the teaching of children with special educational needs, this course now appears to be a general one for teachers that puts forward a particular viewpoint in classroom pedagogical practice.

But the effectiveness of any teacher training system, however valuable are its initiatives, cannot really be considered separately from the situation of the teaching profession. Iceland does not seem to be an exception to this rule. Some of the factors that affect the situation of the teaching profession can be briefly brought together here.

The position described is one of a generally depressed profession. A majority up to 70 per cent, we were told, of the young people who finish their teacher training either never enter the profession or leave it early to go on to other employment. There is a high turnover of teachers in most schools, and applications for teacher training have dropped recently. A large proportion of them seem to be over-worked because they take on overtime teaching, and also often undertake other work outside the school to supplement their salaries. This leaves them little opportunity or energy to pursue excellence in their teaching or to regard their work as anything more than a chore to earn money. There is no proper career structure and little chance of promotion, so that it is difficult for them to develop ambition for self-improvement or higher qualificiations and efficiency. Too many teachers are employed only part-time, which means that they are not devoting their full energy and attention to the job.

These conditions understandably contribute to the fact that much of the vision and effort involved in teacher training seems to be wasted, new methods and approaches developed at the College of Education being seldom implemented in the schools, since many newly trained teachers are not entering or staying in the profession, and many of those actually employed are not trained in modern methods. When such factors as inadequate facilities and buildings, insufficient encouragement and supervision from the authorities, and the isolation of rural schools are added to this account, the reports of some low-points in teacher morale become credible.

However, undoubtedly the principal problem is the poor reward, both monetary and non-monetary, for teaching at all levels. Teachers' low pay and their manner of payment seems to reflect what can be a refreshing egalitarianism in Iceland that puts this profession in line with all other ordinary jobs.

Data that document this position are presented in the excellent "Background Report" prepared by the Icelandic authorities. Average monthly salaries for certain groups in the Icelandic labour force are compared for 1980-1984 in Table 1.

Table 1. A comparison of the average monthly salaries at the basic rate from 1980 to 1984

	1980	1981	1982	1983	1984
Primary teachers	100	100	100	100	100
Secondary teachers	114	112	112	112	110
Unskilled male workers	78	81	81	82	84
Unskilled female workers	75	80	80	80	81
Skilled workers	98	106	107	108	110
Work in commerce (men)	94	93	91	94	97
Work in commerce (women)	72	72	72	71	74
* The Federation of State and Municipal Employees	90	90	90	90	91
* The Federation of University Educated People	118	118	118	118	117

* Since many secondary school teachers were members of these Federations, these figures are depressed, and do not reflect the contrast with teachers' salaries.

Source: Table XVIII of the Background Report.

However, teachers like most wage-earners in Iceland work overtime "in order to make ends meet": for example, during this period, primary teachers 14 to 18 per cent overtime; secondary teachers 23 to 31 per cent; unskilled workers 48 to 55 per cent. With this addition of overtime these monthly salaries compared as in Table 2.

Table 2. A comparison of average monthly salaries at the basic rate with the addition of overtime from 1980 to 1984

	1980	1981	1982	1983	1984
Primary teachers	100	100	100	100	100
Secondary teachers	122	121	122	124	122
Unskilled male workers	103	110	108	103	106
Unskilled female workers	80	84	87	85	86
Skilled workers	123	136	139	133	136
Work in commerce (men)	100	99	99	100	106
Work in commerce (female)	75	77	77	75	79
* The Federation of State and Municipal Employees	106	109	109	106	107
* The Federation of University Educated People	126	131	131	136	134

* Since many secondary school teachers were members of these Federations, these figures are depressed, and do not reflect the contrast with teachers' salaries.

Source: Table XIX of the Background Report.

Thus, teachers (and University professors also) singly behave like other members of the labour force and work overtime, and/or on second jobs. (We met one primary school teacher in Reykjavik, obviously admired by his peers, who held down the equivalent of three jobs.) Furthermore, during this four-year period the effective salaries of all other groups gained substantially more than those of the teachers.

This general situation, that teachers are lowly paid, contributing to teacher shortages, especially in the special subjects, and maths and sciences, is a common and unsolved problem in many OECD countries. However, in the Icelandic context in which teaching is regarded like any other job, the general prevalence of overtime and second job activity of teachers is a special consequence of inadequate pay rates. Perhaps this can be acceptable if an over-worked skilled worker is less productive per hour. But can society similarly afford the consequences of low "productivity" from over-worked teachers?

The system of payment by the hour for over-time and part-time teaching (60 per cent of all teaching in the University, for example) undoubtedly contributes to teaching being regarded as a chore rather than a profession. These circumstances dampen any incentive to reorganise the teaching process (classes are very small for example; we seldom saw more than 15 students with a teacher) or to develop more creative teaching procedures that could raise the educational effectiveness of teachers' time. This line of thought seems to be corroborated in that much, but certainly not all, of the classroom activity that we observed was surprisingly routine, teacher-talking, work-book and home-work checking oriented, despite the obvious opportunities of small classes, general good-will and openness displayed on every hand.

However, this denigration of the teaching profession may be due less to an egalitarian social setting than to the deeper cultural notion that teaching is merely a common-sensical activity, until recently performed within the family, that requires no special training. For example, when a staff writer for Iceland's leading newspaper wrote (*Morgunblad*, 22 February 1986) that the professional training of teachers is irrelevant to teachers' success in their jobs, he was representing a widely-held view that the development of people's intelligence and culture does not rest on the quality, or even the existence, of schools. This attitude harks back to a time when parents *were* at home for their children and before Iceland entered the modern world economy. Attitudes and priorities towards the teaching profession, that now must act both *in loco parentis* and as the locomotive of technical excellence required by future generations, cannot remain at this point. Otherwise the quality of teaching in schools could actually have a negative impact on the country's culture.

Raising the status of the teaching profession is of course likely to be a two-way highway in Iceland as elsewhere: the community begins to recognise the importance of education while education lifts itself up to warrant this recognition. First, teachers at all levels can, encouraged by leadership cadres – the university, the Ministry, the teachers unions – begin a permanent campaign to deepen their professional skills. Second, educators can consider how to evolve a career structure (such as is now under discussion at the University) so that the obtaining of qualifications can be seen to lead to a worthwhile reward, and so that there are opportunities for initiative and added responsibility to be rewarded by higher status. This is certainly the way in which business enterprises are organised, and we can see no reason that egalitarianism should operate so extensively in the teaching profession when it does not do so in many others.

Finally, on the basis of these kinds of moves educators can attempt to establish their professional identity. The planned association of Iceland's two teachers unions (that for primary and that for secondary teachers), and their projected disassociation from the civil service unions, may lead to a perception of teachers as an integral self-respecting group of professionals who have a distinct and significant contribution to make to the political and economic welfare of Iceland, once they are given an appropriate means to do so.

V

THE UNIVERSITY OF ICELAND

The general situation

The University of Iceland is the most potent symbol of modern Iceland's cultural identity. Behind it is a nation with a thousand years of literacy. Yet, as universities are viewed, it is brand new. In 1945 the number of students at university level was some 320, or 0.2 per cent of the population as a whole; by 1984/85 the number at university level (including those studying at the University College of Education) had risen to 4 480 or 1.8 per cent of the substantially greater population. This expansion had been particularly rapid in the last decade, climbing by some 1 500 in that time, and of course represents a genuine accomplishment. One of the examiners, a graduate of the University, and a frequent visitor, has had the privilege of witnessing this growth. Current projections are for a total student enrolment of 5 200 by the year 2000.

The urban areas of Iceland are somewhat over-represented, comprising almost two-thirds of the current student body. However, the difference in enrollment figures between men and women is now statistically negligible (just over 0.5 per cent in 1983). This impressive statistic is closely matched by the University's recent final examination rate: 197 women and 254 men in 1984/85, by contrast with 38 women and 131 men in 1970/71 (i.e., 1 in 4 graduates in 1971 were women, 4 in 9 in 1985).

It should be added that nearly 2 000 Icelanders are studying at university level abroad, the great majority of them in Denmark and the United States. Many of these are doing the doctoral and post-doctoral work that they cannot at present do in Iceland, since the University does not offer the PhD. Our understanding is that the University has a good record of placement of its students in high-quality universities abroad for purposes of doctoral and post-doctoral study, and that some 90 per cent of these students in fact return to Iceland to begin a career.

While the University of Iceland is funded in very large part by the government, certain entrepreneurial features of the university system itself are striking. The university owns and operates, for example, three business firms: the University Lottery, the University Cinema, and the Reykjavik Pharmacy. Proceeds from the first go to provide travel grants for University faculty and students, and from the third to support the Department of Pharmacy. Within the University, the Computing Centre is a self-funding entity, using service fees to cover both running costs and capital expenditures. And the students themselves operate or co-operate several imaginative enterprises.

The Student Centre, for example, is an independent corporation owned by the Student Union, the University and the Ministry of Education. It owns and operates several businesses, the proceeds of which go for the benefit of various student enterprises. Among these businesses are: three campus residences, a bookstore, a travel agency, two day-care centres, a cafeteria and several small coffee shops. During the summer it also runs a hotel in one of the residences.

In other respects too the student participation in University affairs is striking. Four of the University's Council of fifteen voting members are students; students participate in the triennial election of the Rector; they have sizeable representation on the General Council of each of the nine faculties of the University; and they have representation on all executive bodies to which the larger faculties often agree to delegate various responsibilities.

Notwithstanding all of this expansion and institution building, the University could reasonably be said to be at the beginnning of its development. There is a shortage of everything: funding, classroom facilities, laboratories, library space (a situation some describe as "disastrous") and student accommodation. Despite the excellent, even architecturally splendid, new structures, the University's building programme is largely in the future. The University shares with the rest of the education system and other public programmes the feature that in attempting to fulfill all the functions of a national institution its unit costs are very high in relation to the small size of the economy that supports it. This is all the more reason why at this juncture a sustained effort is called for to examine how the University could be made more efficient and effective, what institutional rigidities and anomalies have already appeared, and what are the University's opportunities and possible priorities. This has indeed been the sense of recent discussions that have been held about the future of the University in Iceland. We will attempt briefly to comment on some of these areas of concern.

Teaching

The University has nine faculties: theology, medicine and pharmacy, law, business administration, philosophy, dentistry, engineering, natural sciences and social sciences. The majority of students come to university at the age of 20 upon matriculation from secondary school, and such matriculation suffices for entrance in most cases. A *numerus clausus*, however, operates in the case of certain faculties: in that of pharmacy and physiotherapy a restriction is imposed at the outset, in that of dentistry and medicine continuance in the programme is contingent upon the result a student achieves in examinations set at the end of the first term or terms. The result of all this is a large 50 per cent dropout rate at the end of the first year, the greater part of it in the professional faculties. This means that the overall dropout rate is enormous: only 25 per cent of those who register for degrees actually get them. The number of entrants is increasing faster than the number of graduates. The demand for University is increasing still, and will continue to do so until the end of the decade – a demand partly satisfied by the one third of Iceland's University students who study abroad. Whether such wastage should be tolerated, from the point of view of the use of university resources or that of effective education, seems very much in question.

Degrees at the University tend to be fairly specialised. There has been much diversification of courses over the last twenty years, and there is a wide variety of courses available, but nearly all highly-specialised ones; more are planned. This has the beneficial result, as has already been noticed, that students wishing to continue their studies abroad have little apparent difficulty finding places and usually acquit themselves well. But it offers little flexibility for those many students who, faced with specialised subjects, mostly taught in large class lectures, and not yet sure of a career path, would probably benefit from a more general first year. Some of this group of students, one may be sure, are among those who abandon the university after the first year, discouraged by a too hasty specialisation over which they had no control.

The minimum requirement if such specialised university tuition is to be the rule, would be a highly developed system of student guidance and advice in both the secondary schools and the University, and well-coordinated between them. However, links between the schools and the University are not good. The University complains that the students are poorly prepared – this despite the fact that they are already a select group – and the secondary schools complain that the University does not make its requirements clear. This exchange seems to present a new opportunity to define the educational goals for youth at these levels. Then, on the basis of such thinking some structural change within the schools, within the University and between them, may be in order. For example, Icelandic authorities could consider the introduction of a four-year degree, as in many European and North American universities. As things stand, primary and secondary education combined amount to thirteen years, one more than most western countries find necessary. One way of accommodating a first year of general studies at the University would be to reduce primary and secondary education to twelve years for those who upon matriculation opt for University study, with a thirteenth optional year for others or for those who fail to matriculate after the twelfth year.

The issue of a more general course for first-year students raises the more general policy question of the University's future direction, whether towards a concentration on training specialists for particular occupations or towards a broader scientific and cultural provision, now largely lacking. The current specialisation and rigid department structure seems to be attached to negative tendencies in the University. First, it seems to be conducive to the fragmented kind of teaching that lends itself to the lecture method and to part-time teaching "by-the-hour". Secondly, it inhibits inter-disciplinary courses, programmes and research – the kind of research that is always required to go after problems in the outside world.

As far as the faculty is concerned, it is remarkable that only 215 are permanent full-time equivalents, while some 400 or so are part-time teachers and carry nearly half of the teaching load of the University measured in contact hours. About half of the teaching and examining at the University is done by part-time teachers, 10 per cent by tenured teachers working overtime, only 40 per cent is done by regular staff in regular time. The effect of this on the the quality of teaching at the University can well be imagined, though at the moment it cannot be demonstrated, since the University does not appear to have any precise system for evaluating the quality of its teachers, part-time or otherwise. But it would seem *prima facie* very probable that a teacher whose main job lies elsewhere, and who has only a few hours a week to devote to university teaching, will only in the rarest of circumstances be engaging in that ongoing, basic research that ought at least in theory to underpin all university teaching and to render it thereby fundamentally different from other types of teaching.

The matter is of some importance, since it is currently specified, in agreements between the faculty union and the Ministry of Finance, that teaching duties and general administrative duties shall be between 40 and 60 per cent of the workload, the remaining 40 to 60 per cent being left free for research. But how carefully this is monitored is unclear. Indeed, how much of that 40 to 60 per cent earmarked for research could even possibly be devoted to it by some full-time faculty members is open to question, since so many of them engage in overtime teaching and/or have a second job off-campus. Whatever the reason for this situation – and university faculty, like teachers elsewhere in the system, have argued strenuously that given current salaries, they, like so many Icelanders, simply cannot make ends meet without in some way supplementing their income – the result is that much less research *appears* to be done at the University of Iceland than its size and pivotal place in Iceland's education system undoubtedly demand.

We say "appears" because the University's own lack of self-evaluation techniques makes documentation of such a claim almost impossible to come by. There are, for example, an impressive number of Institutes attached to the University, all of them offering an ambience and facilities for research on the part of the faculty members that constitute their membership. But whether the amount of research done there is commensurate with the 40 to 60 per cent of time supposedly available for it could only in fact be demonstrated by impartial external appraisal. In the case of the University of Iceland, such appraisal could only be international, since there is no other university in Iceland that could supply the scholars who would most naturally serve as assessors of the various programmes. This would no doubt be a costly undertaking, but it would seem necessary if the University is to have some idea of the quality and extent of research in which its faculty engage, and the necessarily international quality of such an assessment would bring with it the added bonus that the University would finish up with an impression of where it stood in the international arena.

It might be added that, if such appraisal is to be effective, it should take place on an ongoing basis (every six or seven years). And it would, of course, include assessment of the quality of teaching in the various programmes. Its effectiveness would, however, be in doubt if the University itself were not committed to a system of merit increments for perceived excellence as part of the salary system, along with a system of significant penalisation for those consistently failing to meet minimal standards of academic performance.

All this of course would be hard to reconcile with a system of across-the-board salary increases without regard to individual merit, as seems to be currently the case. It is even harder to reconcile with the system of life-time tenure, which, whatever its merits, contains within itself a natural disincentive to extraordinary efforts that in many universities has proved and continues to prove agreeable to those scholars enjoying its protection. And in all of this we mean to raise questions for thought without suggesting that we have the answers.

At the student level, the system of student loans, while admirable in itself, could well, if not supplemented by a broad-ranging system of scholarships, be acting as an analagous disincentive to the search for individual excellence. As things stand, a simple pass in matriculation year would seem to guarantee, except in a small number of specified programmes, entrance to university and a series of loans to cover one's years of higher studies. Such unqualified guarantees could mean that a much smaller number of students are likely to make extra-ordinary efforts to achieve their full academic potential. Perhaps such a loss is balanced by the gain of others who require this guaranteed security in order to pursue their studies. However, without extraordinary intellectual efforts on the part of significant numbers of both students and faculty, the University of Iceland is unlikely to achieve the high level that, given its unique importance to the country, it would seem reasonable that it strive for.

The colleges and the community

Given the University's uniqueness as a resource, it is disappointing that there is as yet no special provision for part-time students within its curricular structure, and that there are no extension courses offered, or courses for the general public. The most, it seems, that it offers in this regard are a number of refresher courses in a few areas, mounted in cooperation with various professional organisations. To the degree, however, that it has not yet reached the broader public in any significant way, it has, it seems to us, not yet realised a crucial part of its potential. Achieving the desired result may well involve the deployment of significant resources, financial and human, but the accruing social and academic benefits would suggest that action of this order verges on the obligatory.

The relationship between the University and the now university level College of Education has been taken up in the chapter on teacher training. With other non-university colleges the University seems to have even less contact. Again, the University might play an important role in the further development of these colleges. Going further afield we note that: a large part of the faculty, being part-time, is also active in other sectors of the community; University bodies, as mentioned previously, operate a number of enterprises – the Cinema, the Pharmacy; an increasing amount of research is being conducted for industry. These are examples of contact between the University and the larger community. One of the themes of this report is to raise the question of how modern institutions of culture, like the University, can promote cultural participation by the general population. In the light of Iceland's transition from a participatory to a modern culture, this is a special challenge for its University.

Research

There seems to be a good case for the introduction of a doctoral degree in certain fields. Given the current staff in Icelandic studies, and the priceless holdings of the Arni Magnusson Institute, a PhD in Icelandic studies would seem a natural objective in the area of the Humanities. As it happens, far and away the largest number of foreign students currently at the University of Iceland are already in the area of the Humanities, and a PhD in Icelandic Studies would undoubtedly prove to be a magnet to large numbers in such disciplines as Old Norse in many countries, not least other Scandinavian countries, Great Britain, and North America. In the sciences, a natural objective would appear to be a PhD in geophysics, given the country's remarkable physical structure; and in engineering, a PhD in the general area of hostile-climate domestic and commercial building-structures. In all of these areas the University would appear to have something unique and exciting to offer, and research and instruction at the doctoral level in such subjects would do much to transfer it to another plane of academic endeavour, where it finally begins to rub shoulders with the world's major institutions of higher learning.

If such an objective is deemed desirable, an international appraisal of the current faculty and resources in the above and perhaps other areas would of course be a necessary first step; and depending on the results of the investigation, significant resources could well have to be directed to the projected new programmes. Even if, however, the investigation suggested that for the moment the University was not ready to launch into doctoral work, the exercise in self-evaluation would, we think, have been valuable in itself, and an excellent indicator of avenues of endeavour that the University could at some future date pursue.

Although there has been some widely-recognised work by individual Icelandic scholars, the general rule, indicated previously, is that most teachers work over-time or have additional jobs, and most teaching is done by part-time teachers, and therefore, research is at a relatively low level. Furthermore, the research institutes, all of whom come directly under the Ministry, have varying and unclear relationships to the University. Appointments are made by the Ministry. The system whereby each department and institute puts in an annual request for funding which is responded to by the government with an allocation according to the financial situation of the moment is unsatisfactory and inhibits forward planning. Most enterprises seem short of funds, and national investment in research, both fundamental and applied, is going down. This general picture suggests that the time may have come to consider a restructuring of the whole research field in Iceland that would aim at a broad participation in thinking about research priorities, and in planning and coordinating research. Research to serve industry directly has been increasing, for example, and its relationship to those kinds of research that can underpin university teaching, or that can contribute to the advancement of knowledge, could be explored.

Educational research

Education for and about education requires particular attention. It is widely believed that education, like any other modern enterprise, requires adequate investment in R&D. Hence, a Centre for Educational Research in Iceland has been established. It has its own moderate quarters, but its funding and call on other resources is so limited that it seems unlikely to have a significant impact. The existence of the Centre should not be mistaken for a sufficient policy for educational research, however. There is, or has been, research related to education going on at the College, in the University, in experimental schools, in the Ministry and at the Centre for Educational Materials as well as the projects being sponsored by the Centre for research. Could there be a way to promote regular communication among these actors about the nature of their ongoing work, to relate their work to Iceland's needs and to formulate further research policy and practice in this field? The problem is to develop some strategy and priorities for the use of these precious resources in a programme of educational research for Iceland. For example, research that describes what actually is happening in schools with the objective of providing teacher trainers and administrative authorities a factual basis for further action, would seem to be a high research priority.

Finally, the vital function of educational research in a long-term campaign to raise the quality and competence of the teaching profession cannot be overstated.

Concluding comments

It should be emphasized, in conclusion, that in our estimation the University already has many strengths. Our comments above are an attempt to suggest ways in which the University can perhaps build upon those strengths, minimise what seem to be some current weaknesses, and set in motion devices for raising itself to international status. However, discussions at the University speak of the need to think about, and act on the basis of, the limitations of its economic and population base. It is likely to be required to choose a very few fields in which to attain exceptional world-recognised levels of excellence. The University's diversification into many specialised courses already seems to spread its resources too thinly. Furthermore, the University's activities and courses do not yet reflect the idea that it should be the focus of general cultural awareness and advancement in the modern Icelandic society.

Finally, as the most basic resource for both university study and research, and as a primordial cultural symbol for Iceland in its ancient book collections, the planned Joint National and University Library and the announced decision to bring about its speedy completion, are to be commended.

VI

ADMINISTRATION, FUNDING, PLANNING AND THE COMMUNITY

The role of central government

Throughout the review the examiners have been aware that the implementation of policy measures, whether established or newly developed, depends upon the capacities of the administrative system. The education system of Iceland is still highly centralised. The government appoints and pays the salaries of all teachers and part of the capital building costs of schools. The Department of Educational Development supervises the writing and issuing of curricula. Secondary schools and colleges come directly under the Ministry of Education, and while compulsory schools are now administered by Regional Officers and local school boards – they are responsible for implementing regulations and decisions and involved in making some of them – the power of Regional Officers is limited, and their resources extremely so.

The education system is a small one – there are 210 compulsory schools in the country – and is not larger than a medium-sized local education authority in another country. But the geographical area over which the schools are spread is great and local needs very diverse. Travel is sometimes difficult and always expensive. Clearly, some sort of devolution is necessary, and it may be questioned whether this should not be done for secondary schools as well as for the compulsory schools, so as to avoid emphasizing the break between the two periods of schooling, and whether the discretion allowed to Regional Officers and the powers of local authorities should not be greater. The regional offices seem, however, hardly to have sufficient staff to carry out their present duties.

The necessity for most decisions to be referred to Reykjavik means that response to local needs can be cumbersome and slow, particularly in the case of decisions about buildings and about the redistribution of staff and resources between local schools when rationalisation becomes necessary. As can be expected for any over-centralisation, wasteful delays can be the result. The definition of the function of Regional Offices as being to see that the centrally-issued regulations are fulfilled can lead to overmuch concern with the superficial details of organisation and too little concern with the content of education. Of course, it might be further argued that the latter should be dealt with anyway at an even more local level, in the school districts and schools themselves. Supervision of the curriculum and instruction in the compulsory schools are in the hands of the subject directors in the Department of Educational

Development in Reykjavik. These are enthusiastic and dedicated people, but it is hardly credible that they can achieve much when they are so few to deal with schools all over the country. Contact with the schools and the teachers is bound to be sporadic. Opinion expressed on many sides was that this group should be larger and be augmented by more local representatives. However, if the perspective were that supervision and advice for school instruction should eventually depend upon a central organisation, this organisation could never be big enough. It seems rather that a larger organisation might attempt to promote a permanent self-education function within the school system and the schools themselves. The aim would be to continually raise the competence of staff at the most local level, the school, so that less supervision would be required.

Funding

At many points in this review we have reported apparent needs for increased funding. Iceland's authorities are likely to view such proposals for more expenditure as a whole, and in terms of priorities and current social and economic limitations. Therefore, it may be useful at this point to itemize some of the main requirements for additional funds indicated in this review. First, there is the principal question of the pay of teachers, which is widely felt to be so low that it is difficult to attract suitable people into the profession. This applies both to University and schools. In the case of the University and Teacher Training College, as already pointed out, the necessity of overtime and of supplementing income from additional work has a detrimental effect on research.

Research itself is said to be inadequately funded. There is a large number of research institutions mostly attached to the two institutions of higher education, and there is a danger of the resources being too thinly spread. Some overall coordination of research might help to avoid duplication and wastage, but the main problem is that a small country needs to support a range of research disproportionate to its size. Those areas of research most appropriate to Iceland's situation and needs must be adequately funded if the country's economic and cultural future is to be ensured.

Many schools are desperately short of accommodation, both for ordinary teaching (where the shift system is now operating), for teachers themselves, and for physical education and other special activities such as arts and crafts. Extensive expenditure would be necessary to improve this situation. Some savings could be made at the expense of class sizes, which are generally relatively small.

The system by which the costs of school buildings are divided between central and local government is complicated and seems to have unintended results. The fact that the State contribution varies according to the type of school has led to the choice of school being determined by this rather than by the educational needs of an area. The division of costs can also lead to delay in decisions about building and sometimes even to delay in completion when finance for the government share of the costs is held up. Lack of finance apparently can lead effectively to government default in some cases. Thus, the current system seems to be cumbersome and may lead to inequity. For example, it may be that responsibility for school building should devolve entirely on the local communities, with block grant support from central government. On the other hand, the present system whereby the maintenance of compulsory schools facilities (only) is paid for entirely by local communities puts a heavy burden on some thinly populated areas which obviously need subsidisation.

Books and educational materials are provided free in the compulsory schools, but a lack of turnover in these books and materials inhibits the development of new ones. The Centre for

Educational Materials could do much more if it had higher funding. Materials for teaching at the higher school levels are very short.

Policy and the school law (1974) commits the system to provide full library services in each school. The University library facilities are far short of higher education standards. These all await funding.

The problem is largely one of the scale of the operation. To maintain a complete range of research activities, of schools with all the educational opportunities that a modern country requires, and to provide them with a full range of educational materials in a small-scale system is proportionately more expensive than in a large-scale system. The savings that can be achieved in a large-scale operation cannot be made, small print-runs of books and small schools for thinly-populated areas seem wasteful, and the cost of materials for building and other purposes is expensive in Iceland anyway. There is little scope for "rationalisation" even if that were not undesirable on social and human grounds.

The education system as a whole can be significantly improved by higher investment in it. However, despite Iceland's high per capita income, the economic situation summarised earlier dictates that any such increase will be limited and will call for measures and planning that might maximise the impact of any such increase. Of course, such planning would go hand-in-hand with a search for ways to increase the effective use of resources already available. Nor should possible resources directly available to education from the community, families or industry, be ignored in such forward planning.

Planning

Numerous committees have been working on various aspects of education in Iceland over the last year or so – on the future of the University, on pre-school education, on a re-assessment of the work of teachers, on the Social Studies Curriculum project, on primary education, on research and on other areas. All of these give rise to proposals and measures to deal with various problems, but they do not seem to result in plans that would be formulated in terms that can result in decision-making. It would appear that Iceland's central education authorities could use a strengthened planning capacity, a group, whose main role would be to gather together the particular information that would facilitate for decision-making at all levels of the school system.

To explore the likely consequences of possible alternative structural changes suggested in this review would require a major planning exercise conducted in this informational mode. For example, some purely structural changes in terms of time and timing have been mentioned – a longer school day, a longer school year, shorter school career for university preparation, a longer one for vocational students, larger classes, possibly with mixed age groups, starting school at 6 years rather than 7, an additional university year, etc. The pedagogical reasoning and the costs and benefits related to each of these, or a combination, could be carefully thought through.

Other general examples: In this review we have looked forward to more advanced or effective teaching procedures in the schools, and that perspective raises a planning question, namely, could there be a way to exchange higher teachers' pay for increased teacher "productivity"? The structure of teacher training could be changed with a much greater emphasis on in-service training as a permanent part of teachers' daily work. What would the implication be for the Teachers College, for possible local teachers' centres, for centrally-supported teacher training and advisory services, etc.? These examples are meant to suggest the burden of planning work that would normally follow from the issues and suggestions raised by various advisory groups established by Icelandic authorities.

The community: family, labour market and culture

If a sense of direction for Icelandic education emerges from this review, it might do so as we look at important aspects of its relationship to the community. We see three main aspects of this relationship: family, labour market and culture. Some space has already been devoted to the family and, therefore, while noting its integral place in the scheme of things, we shall proceed to comment on work and culture.

Labour market

The 1974 Law established mechanisms that seem to serve very effectively to integrate the compulsory schools into their community environment. These include the joint management of schools by the State and local communities, the Regional Office, with participation from both, the School District Council, with a substantial local representation and endowed with important capacities in the primary schools within its district (guarantee of schooling for every child, building and equipment, appointment of headmasters and staff, etc.), school-family ties, teachers' and parents' associations as well as the participation of students in their last years through students' councils.

The Law also provides for professional counselling and the so-called "work-weeks" at the compulsory school level. As regards counselling, the question arises of whether the excellent underlying philosophy could not be generalised and formulated taking the experience of some districts and schools as a starting point. The links with job-centres and the possibility of summer jobs in the last years of compulsory education are an invaluable advantage which a society with no unemployment rate can offer to its youth.

The picture is less bright from secondary education on, and this has been a long-standing matter for concern. The counsellor or educational advisor in grammar schools and colleges usually reflects the purely pre-university orientation of this type of secondary education. In vocational education professional counselling has existed for years.

Differences in the governing bodies of the three kinds of secondary education are a clear expression of the structural difficulties in the relationships between this educational level and the community and its labour market. Grammar school councils are merely academic, as is the case of the Coordinating Committee between colleges and comprehensive schools. The board of the latter allows for more connections with the environment, though it seems to have a more limited authority than its equivalent in Primary education. On the other hand, vocational education has a nationwide Council constituted of representatives of workers and employers as well as students and schools. The local community is also represented on each school board.

All this seems to indicate that only vocational schools have the adequately institutionalised mechanism to connect with the labour market – at least on paper – though in both vocational schools and the grammar school colleges connections of a broader character are lacking. The coexistence of this duality – clearly a product of history – seems to be blocking the socialising function that the comprehensive schools were meant to fulfill.

The existence of different branches in vocational schools, and to a lesser degree in comprehensive schools, very much reflects that they have to cater to the needs of the firms located near the schools. But the question arises of whether it would not be necessary to have a mechanism for longer-term planning of educational needs at this level, both in regard to the content of the programmes and in the distribution of students, having in mind both the present and future needs of the country.

Similar observations can be made about the University's governing boards that are strictly academic, with no other social representation. A conspicuous example of the separation of the University from social needs seems to rest in the fact that no career or branch related to the primary economic sector exists (when fishing is one of the major resources of the country).

At least 30 per cent of the age group is not included in any form of secondary education, but surely as a consequence of their experience in a modern economy, many of them will need further education. When they return as adult students, much of the secondary education available might not fit their needs any better than it did before. Relating themselves to the buoyant institutions of the modern Icelandic economy, the schools might find themselves energised in notable ways. The College of Arts and Crafts in Reykjavik seemed to suggest this kind of engagement in the community.

Culture

A culture that features artistic activity, practised by full-time professional artists, is even newer to Iceland than its schools. Iceland's greatest literature, its most venerable art form since medieval times, was until the late 19th Century turned out by people who always had other roles and responsibilities in the society. The National Symphony Orchestra and Opera chorus, ballet, drama, musical theatre and cinema all date to the 1950s. Of course, there were notable artists in some of these fields earlier (the first professional Icelandic composer was working in the 19th Century), and modern painting and sculpture, and literature with its enormous head-start, developed many decades earlier in this century. However, it is since the 1950s that the arts on a scale that require the wealth and support of a major urban area became established in Reykjavik.

These brief comments cannot begin to summarise, much less to survey, the current artistic scene in Iceland. A good case could be made, we believe, for doing a separate review of Iceland's cultural development and policy. However, here we only want to say enough about the quality and promise of Iceland's current artistic provision to suggest its possible role in relation to education and the general culture.

As a group or singly, we were able to visit art galleries, museums, a sculpture park, the Institute for Ancient Documents, heard the National Symphony Orchestra, the Opera Chorus, a contemporary musical comedy, a private music school and the School of Arts and Crafts. We did not get to visit the official Schools of Drama, Ballet or Music in Reykjavik that, like the School of Arts, aim at training professionals in their fields. There are many other schools, private or local. For example, there are 50 schools of music and 60 local theatre groups in Iceland. The work of Icelandic composers, playwrights and choreographers are being performed and in some cases have made their way into the theatres of other countries. The standard of modern Icelandic painting and sculpture is high as was that of the performances we attended. Given the size of the population, the standards already reached seem to be remarkable.

The Ministry of Culture and Education has reported figures for 1985 for art endowments. Three hundred and ninety state salaries or prizes, amounting to Kr. 18 675 000, were awarded to individual artists of all categories (writers, composers, painters, actors, film directors, musicians, etc.).

In addition, there were the following distributions among institutions:

Museums, smaller professional theatre opera and dance groups, private arts schools and promotion	Kr 52 250 000
The National Theatre (55 % of its costs)	50 088 000
The National Symphony Orchestra	19 464 000
The Cultural Fund	3 800
The Film Fund	28 000 000
Fund of Office Building Decorations	3 700 000
Film Museum	892 000
National Art Gallery	15 686 000
Smaller Galleries	2 130 000
Nordic Cultural Collaboration	4 400 000

This support to individuals and institutions represents 0.4 per cent of Iceland's financial budget.

If this limited support for artistic development is successful, then it will prepare a small, elite professional group of makers and performers of excellent art. However, there is another consequence that has to be confronted. In modern cultures today most people are merely the consumers of cultural products and do not participate and are not engaged in art itself, which is left to the relatively few professionals. In our visits to primary and secondary schools we saw very little expressive artistic élan or flair. Most of the pupils seem likely to become the future consumers of cultural products in a typical urban society.

This observation brings us back to a fundamental concern expressed by Icelanders in the face of modernisation, a concern to maintain their cultural identity. It is apparent that this is not a task for schools alone. They can play an important role, however, though only within the context of a larger cultural force. The possible character of such a cultural force in Iceland is suggested both by features of its traditional culture, still remembered by many older people and by scholars, and by some features of today's culture, like the small fishing village we visited where 60 per cent of the primary school children were engaged in music *after* school and the adult community organises its own theatre.The question that is brought to mind is this: In modern Iceland would it be possible to see the growth of serious amateurism? Serious amateurism involves reaching for very high standards, but since the amateur always has another job, amateur art is emphatically not for money.

This kind of cultural development does not come without support and leadership. The key factor would be the attitude of the professionals. They would have to see their role as the main promoters and developers of the amateurs. The projected cultural norm would be that almost no one, whatever his/her job in the economy, would be without a chosen art in which serious regular activity would be common. Education would not be considered adequate or complete without this accomplishment. The curriculum for children, using the school and other community resources, would be geared to this norm and the adult world would be intensely educationally active in order to join in and give leadership to the young in this endeavour.

In this final section we have tried to deal with the need for Iceland's educational institutions to come closer to the community. It has been suggested here that this need particularly involves relationships with families and with the labour market and could also well involve engagement with artists and others to promote popular participation in the arts. Through this triangle of relationships, the schools could draw new vitality from the community and, of course, would eventually return it.

Part Two

RECORD OF THE REVIEW MEETING

(Paris, 5th June 1986)

Opening remarks

Dr. Brenner, as Chairman of the Education Committee, opened the review meeting by welcoming the Icelandic Delegation, headed by Mr. S. Hermannsson, the Minister of Culture and Education, and also welcomed Mr. Kroyer and Mr Cazimajou, respectively the Ambassadors of Iceland and France to the OECD.

Dr. Brenner summarised the general purpose of the Committee's programme of country reviews, to gain insight into common educational issues that are highlighted by individual country experience, and additionally to learn more about the country itself. The case of Iceland, he said, because of the quality of the Background and Examiners' Reports, provided a particular opportunity for the Committee to deepen its knowledge and appreciation of a Member country that is geographically remote from both Europe and America, as well as from the Pacific countries, and to learn not only about its education system, but also "about the great history of an old nation and about the very rich culture of this nation".

Dr. Brenner then posed a question recognised to be of major significance for many countries today: "How a country, with a long heritage and a rich culture, can manage to face the challenges of a modern society while maintaining its cultural uniqueness and strength and, even, to develop it."

Dr. Brenner then introduced the three examiners gave the floor to Mr. Hermannsson.

Mr. Hermannsson conveyed the gratitude of the Icelandic authorities for the opportunity to discuss and evaluate Iceland's system of education in the Education Committee of the OECD. He then stated Iceland's perspective on the importance of education for its economic and social development today:

> "In order to survive in a highly competitive world we have to invest in education to the limit of our economic potential. We must render our education system more productive both in terms of the diversification of our economy and in terms of the personal development of our young people. Good education is also our most effective means to guard our national identity and our language in the face of an increasingly uniform world."

Mr. Hermannsson introduced the members of his Delegation, and expressed his pleasure at meeting the examiners again, who "effortlessly seemed to spot our problems". He then reported the Icelandic decision to translate the final report into the Icelandic language and use it as background for a series of national conferences.

Although the Examiners' Report, continued Mr. Hermannsson, "is clearly that of a guest on a short visit, many of (its) observations are very acute and will help us to see more clearly what we can do to improve our education system. This is exactly what we hoped for when we received our guests from the OECD, with their varied and distinguished background in education. For as an old Icelandic saying goes: 'Keen is the eye of the guest'."

Accordingly, the examiners' draft report seemed "negative" to some Icelanders, but Mr. Hermannsson stated his understanding that OECD reviews spend less time on praise, putting it "only generally, but zero in on specific problems and try to deal with them in detail".

Mr. Hermannsson called the Committee's attention to some of the particular features of Iceland related to education. First, as these affected the examiners' visit: to follow the usual procedure of these reviews in Iceland, namely to visit educational facilities, not only in the metropolitan centres, but also in more remote rural communities, meant "as we warned", said Mr. Hermannsson, that the examiners could have been "trapped for days ... but when they arrived in the middle of February, Iceland was having the mildest weather in Northern Europe ... the sun shining ... throughout their visit". The examiners might have believed that we had some influence with the weather authorities.

Beyond Iceland's geographic location and weather, Mr. Hermannsson wanted the meeting to bear in mind two other fundamental aspects of Icelandic conditions. First, while Iceland is a country of 103 000 square kilometres, its population is only 240 000. Thus, its entire school system is, in the words of the Examiners' Report, "not larger than a medium-sized local school education authority in another country". A second basic fact is that Iceland enjoys full employment, has no youth unemployment, and even has a shortage of labour in some fields, including education.

Finally, Mr. Hermannsson summarised a number of measures initiated or enacted in the months immediately preceding the review meeting, many of them since the examiners' visit, as follows:

1. A bill has been passed by the Althing (the Icelandic national legislature) securing the financing of the completion of the building that is to house the National and the University Libraries. These two libraries will be able to move into the new building in 1990.
2. A committee has been set up to draft a bill that will be put before the Althing making the upper secondary stage one system, but a flexible system, not one that casts everyone in the same mould.
3. The same rules for financing will be set for all types of secondary schools. There are now three different sets of rules for financing this stage as emerges from the Background Report. The grammar schools are financed completely by the State, but comprehensive schools and the vocational schools by the State and the local authorities. The compulsory school is also financed jointly by the State and the local authorities, but the rules by which the cost is divided are unduly complicated, as pointed out by the examiners. A committee has been set up to revise the compulsory school law enacted in 1974 with the aim of making these rules clearer and, also, to deal with other aspects of the law that need changing. The State will have to go on paying the largest part of the expense for the school system, but both committees will explore the possibility of giving the local authorities more responsibility for their schools and at the same time of giving them more power and freedom to use their own initiative. This could for example be done by allotting them a block grant for school buildings as suggested in the Examiners' Report, and this might even be done for the running of the schools also.
4. As pointed out in the Examiners' Report, distance learning could add substantially to the educational opportunities for people living in the remote areas of Iceland. This alternative is now being examined as to how and to what extent distance learning might be feasible and practical. Particularly it is being considered to offer distance

learning to those who teach without full qualifications, thus giving them the opportunity to acquire qualifications without spending much time away from their homes.

5. As mentioned in the Background Report, teachers in Iceland have for the last few years fought to have the teaching profession chartered and, as a result, a law was passed by the Althing in May 1986 prohibiting the employment of unqualified people as teachers. However, in view of the large percentage of unqualified teachers now employed, there is a clause in the law permitting temporary employment of unqualified people, but only with the special permission of a committee set up by the Ministry of Education. As a result of the new law, education authorities will make a special effort to offer those who have been teaching without qualifications the opportunity to obtain a certificate, for example by distance learning. It is believed that rather than to be in peril of losing their job, should a qualified person apply for it, the unqualified teachers will take the opportunity to obtain qualifications, thus strengthening the professional base of the teaching profession.
6. Since the examiners' visit at the end of February there has been published a draft curriculum for the upper secondary school at the initiative of the Ministry of Education. This draft curriculum was put together by consultation with and assistance from head masters and teachers of the secondary schools, representatives from the University of Iceland, the Teacher Training College, the Technical College and the Council of Vocational Training. Some of the secondary schools will put the new curriculum into effect as from December 1986 to try it out and it will hopefully be issued in the final form in Spring 1987.
7. The work on the curriculum has dealt, at least partially, with one aspect of the examiners' criticism as far as the secondary school is concerned, namely that the schools at the secondary stage have relatively little contact with one another, the Ministry and the University. By working together on the curriculum, those concerned with the secondary school were brought closer together, and it is hoped that this is a beginning of closer co-operation between the secondary schools along the lines suggested by the examiners and this we will certainly support.

Mr. Hermannsson then invited the examiners to proceed with their questions.

Mr. Arango opened the discussion on behalf of the examiners, conveying their gratitude to the OECD "... for trusting us with this mission and to the Icelandic authorities for everything they did to help us discharge our duties." He continued, "we were asked to delve into Icelandic education, and in the process we got to know a fascinating country and a highly-civilised and very warm people. Every country is unique, but Iceland is more so because of its imposing landscape, fascinating history, rich national personality and strong cultural identity". Furthermore, when the "semi-polar expedition" that was anticipated for an educational review in mid-winter Iceland did not materialise – two weeks of sunny weather, heavy clothing and gear unused – Iceland's uniqueness was again emphasized.

Mr. Arango introduced his colleagues: Dr. Faulkes, scholar in Nordic literature (University of Birmingham) whose command of the Icelandic language and culture made him "our living resource centre", and Professor Robinson, who as a university Dean (of the School of Graduate Studies, University of Toronto) brought to the review "his perspective both as administrator and as professional philospher". Mr. Arango also cited the services of Mr. Hayward of the Secretariat "to all effects an active member of the examiners' team".

A two-week visit, and some hundreds of pages of background reading, explained Mr. Arango, represent a very limited basis for penetrating "into the complexities of any education system. So that it is very likely that our report will be flawed with factual mistakes and shortcomings and misapprehensions ...often the risk of the outsider's view". However, experience in OECD reviews, including those outside the field of education, demonstrate the great value of this external perspective, said Mr. Arango, "having had the good fortune to be on both sides of the table of OECD reviews. My best wish for the Icelandic authorities is that this review may be as useful to them as the recent review of Spain's education system was for the Spanish authorities".

Mr. Arango noted that the study of Iceland's education system drew particular attention to the problems of education's complex interrelationships with society. "The Icelandic education system", he said, "like all others, is the unique product of the history, traditions and the physical and socio-economic context in which it evolves. At the same time it is a variation of a more general educational model, sharing marked similarities with others, particularly in Scandinavia and other European countries. Like other modern systems, it has experienced very rapid and successful expansion – in this case even more rapid than most".

However, some of Iceland's particular physical and structural characteristics must be accounted for in its education, said Mr. Arango. These include Iceland's small population (240 000); the wide dispersal of more than half of this population over a large territory; the isolation of some of this population in times of difficult weather; the uniqueness of the language, limited to Iceland (except in a few scholarly circles). Such factors deny the country the possibility of economies of scale in such things as book production and the organisation of large classes or schools.

It could be further expected, said Mr. Arango, that such structured features would be strongly reflected in Iceland's educational system: "However, we found that, perhaps due to its very rapid expansion, many features of Iceland's education system are quite similar to those countries with much larger populations and this raises the question of whether Iceland's education could not strive to find its own comparative advantage by adjusting better to its own patterns".

Mr. Arango next pointed out that Iceland's education system faces the challenge to adapt to the demands of a society experiencing changes that have been unusually rapid and deep-reaching during the last few decades. These changes are the culmination of a somewhat longer transition, a "great transition from pre- to post-industrial society achieved in an astonishing short span of three generations – keeping, in the process, a surprising degree of internal balance and avoiding major dislocations". However, even now the economy is still forced to undergo a further transformation, Mr. Arango continued, "In order to reduce dependence on the 'single crop', fish, and to diversify towards a more modern industrial and service economy. The difficulties involve finding a basis for new comparative advantages besides the one derived from the Icelandic seas that have provided a major source of Iceland's external income. Such economic diversification demands strenuous efforts to which the education system cannot remain alien. Educational adjustment to the labour market far from easy, does not imply a renewed faith in manpower planning, but there are always ways and strategies for education to make a positive contribution to social and economic change". On this basis Mr. Arango posed the question:

> "We would like to ask the Icelandic authorities how they perceive this complex picture and what is being done to adapt the education system to the particular characteristics of Iceland as a country and society and to its economic priorities?"

Before closing Mr. Arango offered a "final disclaimer" that "if some paragraphs in the Examiners' Report sound critical, they have to be seen and read in the context of our deep appreciation for Icelandic society. It is a very highly-developed society which, because of that among other things, shows excellent educational results and high educational attainment. What we are asking about is not the overall level of results that, of course, are excellent and correspond to those of other evolved, educated societies, such as Iceland, but rather, we are asking about the contribution of the education system, of its design, structure and actual functioning, to this general educational welfare. And these questions are posed not in absolute, but in relative terms – how and by which means and ways the contribution of the education system to society at large could be enlarged and improved".

"Finally", concluded Mr. Arango, "I hope that our efforts here adequately reflect our deep appreciation for Iceland, for its educational and cultural institutions and for all the courtesies shown to us during our visit".

I

THE GENERAL PICTURE

Question 1:

Diversification is the agreed top priority on the long-term agenda for Iceland's economy. How do Icelandic authorities envisage and plan for the school's and University's role in fulfilling this goal?

Question 2:

Iceland has succeeded in accomplishing a remarkable expansion of its education system at all levels. However, two general trends now seem to threaten its effectiveness:

a) *To somewhat oversimplify, the parents are at work on more than one job, the teachers are at work on more than one job, and the labour market is providing less of the traditional opportunities for youth – altogether reducing the time and quality of adult involvement in educating the young.*

b) *The structure and content of the school system seem now to have taken a form more adapted to larger countries. For example, it includes such features as age-grade class organisation, curriculum specialisation and teacher behaviours structured for the far larger populations of other countries when, in Iceland, classes of a dozen pupils and schools of a hundred are not uncommon.*

To what extent do Iceland authorities agree with this general picture? How do they see the actual needs and opportunities for education that arise from specific features of Icelandic society today?

Diversification of the Icelandic economy and education

Mr. Larusson of the Icelandic Delegation began the discussion on the first question posed by the examiners. He confirmed that diversification is the top priority for Iceland's economy, and that to meet the demands involved required "appropriate educational programmes". Disclaiming that Iceland had any simple answers for this large issue, Mr. Larusson proceeded to describe relevant Icelandic approaches and procedures:

> "A formal plan for the role of the schools in fulfilling this goal of diversification does not exist, but a general working approach to the problems has been adopted. We consider this area to be not only the responsibility of the Ministry of Education, but also the responsibility of all agencies involved. It is generally recognised by all concerned that as

working life and society become more complex – new technology more widely used in different industries – stronger demands will be made on the education of the workforce. It is also recognised that it will be more and more difficult for the education system alone to meet these demands. The main reasons are increased costs involved and the smallness of the population. It is the role of the Ministry to set the educational standards. As for general education, there is wide agreement in Iceland on what the standards should be, and these are the same for all and can be taken care of in ordinary schools. Therefore, this part of the educational programme does not create problems. But the special courses, i.e. courses that have the goal of preparing students for specialised work, present more difficulties.

These courses must be defined by the industry in question. The facilities needed for teaching these courses are often very expensive so that it seems most appropriate that the companies concerned be responsible for the teaching.

We believe that by co-operation of this kind between the education authorities and working life, it will be possible to create the educational programmes needed for reaching the goal of diversification.

In the near future it will be necessary to expand and/or restructure the education system in order to cope with such needs of the future economy. This will be done gradually in co-operation with those who are concerned and as working life requires.

What has been said applies to the secondary schools, but the same procedure could also be used at the University level. It should be added that according to an amendment to the University law, made in 1985, the University of Iceland can establish partnerships with business companies engaged in research and development, with the aim to develop and utilise ideas and results derived from research projects at the University.

The first partnership of this kind was recently established in the field of computer and electronic industry.

A Research Service Centre is being established at the University. Its task will be to distribute information on research activities and specialised knowledge available at the University and to facilitate the engagement of University research in fields of importance for the industries of the country. The Centre will also offer practical service to research workers, i.e. in connection with project contracts."

Adapting Icelandic education to the features of Icelandic society

Mrs. Jensdottir next presented her authorities' views on the second general question. She saw this question in terms of a number of issues that she discussed in turn.

Young people's work in the economy. A high proportion of 13-14 year-olds continue in the Icelandic tradition of beginning to work full-time during their holidays. The traditional jobs, such as those in agriculture, being replaced by jobs in other sectors. Educators, and the general public in Iceland, regard such work as an important part of the young people's *educational* experience. Also, youth work is recognised as a valuable contribution to the labour-short economy. For these reasons the Icelandic authorities would not want to lengthen the school year, which nevertheless should be – as it is not yet – established at nine months for the whole country. Some flexibility in this timing might still be needed for seasonal rural work.

The high incidence of overtime work and doubling up on jobs, that affects teachers as well as parents, and thus has an impact on adult involvement in child care, can only be diminished, said Mrs. Jensdottir, by raising salaries. This can happen by raising the national product, that had in fact actually declined for three years running. It did begin to rise again in 1985 (and has continued to rise in 1986). However, long hours of work are also a response to shortages of skilled and expert workers in many fields.

The absence of parents at work, particularly with women increasingly entering the labour market, raises the question of the *short school day*, that leaves children without adult supervision. This problem is being met in Iceland by inviting older children to stay in school, making use of the library, for example. However, said Mrs. Jensdottir, resources are still lacking to retain younger children in school. The slowing down of Iceland's population growth will mean a slower growth in the school enrolment, which may free additional resources for this purpose. The shorter school day does, however, facilitate young people's participation in other cultural and social spheres – the fine arts, music, dance, etc. – and this should be remembered when contemplating changes.

Flexibility and innovation in school organisation, particularly breaking away from organising classes or grades by single age groups, was the next topic addressed by Mrs. Jensdottir. She pointed out that teachers are trained to teach all grades in the lower schools, but generally not how to handle different grades or ages in the same classroom, and grade-by-age classes are still the common form of organisation in the schools. For this reason, the University College of Education has been emphasizing this issue in its in-service training programme. However, reported disinterest of many head masters has led to plans being made by the College to broaden its programme so that an increasing part of it is school-based.

Regulations already allow mixed-age classes – allowing for three age groups – in small schools. It is being contemplated to further liberalise these schools in this direction according to their own circumstances. Several larger schools have experimented with this organisational form with good results.

It is in the light of these kinds of school organisation questions that the examiners remarked that Iceland's schools seemed to follow patterns more adapted to much larger countries, noted Mrs. Jensdottir. She quoted from their report that "national identity is not preserved by clinging to the past or by raising barriers against innovation" (Chapter I). "We must admit, however", she continued, "that most of our innovations have been based on the experience of other countries as, for example, within the framework of the OECD. But we have to adapt this experience to our reality, as you the examiners commented quite rightly".

In conclusion, Mrs. Jensdottir expressed the belief that Iceland had been striving to achieve the ideal of "an expressly Icelandic education system that is also effective in the context of the modern world. Icelandic authorities believe that their education system is – despite features found in large countries – expressly Icelandic. However, in our need for rapid expansion and the effort to keep pace with innovations elsewhere we may have been deflected from our Icelandic identity. But we believe that in the face of the international mass media we will become constantly more aware of the need to put Icelandic values above all else".

II

EARLY SCHOOLING

Question 3:

A good deal of attention has been paid to the provision of infant-care centres and pre-school classes, given the frequent pattern of both parents working full-time. These two services seem to have significantly different roles. Could better use be made of the opportunities offered by the infant-care centres to prepare children for the compulsory schools? Should more emphasis be placed on the educational role of the staff in them?

The nursery school teachers seem to be well prepared for their functions, but there are too few of them, given their low pay. Is there concern or are there plans to change this situation? Finally, how can the tendency for conflict between regular classroom teachers and nursery school teachers be resolved when both groups are involved in pre-school classes?

Question 4:

Despite excellent efforts from many quarters, innovations along the lines of modern approaches and procedures in the classroom seem to be adopted only very slowly. With this in mind, the following can be observed:

- a) *Experimental schools seem to be isolated, remaining simply as experimental schools.*
- b) *Centres of excellence in training and practice, such as special education, nursery school, teacher training, the School of Arts and Crafts, seem to remain "at the margin", not affecting general school practice.*
- c) *The integrated social science programme begun in 1970 seems to be an example of innovation that has not involved sufficiently wode participation, despite its interesting and ambitious concept.*

Could the Icelandic authorities comment on these observations, indicating their view to the problems of implementing innovation in Iceland's schools?

Question 5:

Language learning, including foreign languages, is recognised as a special responsibility of the schools by giving it the greatest amount of time in the curriculum. In the light of this *importance, along with the pressures to learn other subjects for a modern society, what steps are being contemplated:*

a) *to look for more efficient techniques of teaching;*
b) *to amalgamate language with other subjects;*
c) *to provide teachers with training and advice;*
d) *or any other strategies?*

Question 6:

Significant progress in bringing education to rural areas and small towns is still short of Iceland's goals to provide equal educational opportunity. The common problems include unqualified teachers, teacher turnover, inadequate facilities for physical education, arts and crafts, etc., short school day and school year, teaching procedures, ill-adapted to small, mixed age class groups, little orientation to the world of work. What measures are being taken or contemplated to deal with this range of issues?

The questions dealing with pre-school and compulsory school programmes were introduced by Professor Faulkes, who claimed, despite his years devoted to Icelandic studies, the continued role of an outside observer of a complex modern society whose courtesies – shown generously to the examiners – nevertheless reflect traditions dating from the Middle Ages. He cited the provision of compulsory schooling – "the heart of any school system" – for every child in Iceland from age 7 to 16, despite the distant and isolated locations of many, as a remarkable achievement in the short period in which it has been accomplished.

Pre-school programmes

Professor Faulkes noted that although seven is the formal starting age for schooling, the great majority are in school at six, some even at five. However, there seems to be an ambiguity in the conduct and organisation of programmes at this level that starts with the three kinds of personnel involved: first, those trained as regular teachers; second, those trained as nursery school teachers; third, a sizeable group who have virtually no training at all. Professor Faulkes particularly called attention to the excellent preparation offered by the Nursery School Training College which, however, is at the secondary school level. As a consequence, compared to the teachers from the University or College of Education, nursery school teachers have less academic background, lower wages and status and, also, a different approach to their work. Pre-school experience is provided in day-care centres, nursery school and kindergartens attached to regular schools – representing again different settings and approaches.

The great importance of the pre-school years in Iceland is widely recognised because of the comparatively late age (seven) for beginning formal schooling and because of decreasing parental presence in the home to guide early childhood socialisation. Therefore, Professor Faulkes asked how the Icelandic authorities viewed this field and whether any changes were contemplated.

Mrs. Jensdottir confirmed that there were two differently trained groups of teachers involved with pre-school children. Of these the nursery school teachers are mostly in the day-care centres, and although these teachers are trained to work with children to age seven and many of them do prepare the younger children for pre-school, they are seldom employed in the pre-school classes themselves. "We are not convinced that this should be so and we welcome your questions", said Mrs. Jensdottir. "Also, the shortage of nursery school teachers does lead to the presence of many unqualified personnel in day-care and similar service for these young children."

The Icelandic authorities had been considering a new proposal in answer to this situation, offered by the National Union of Nursery School Teachers and by the Nursery School Teacher Training College, to bring nursery school training to University level. This proposal will, of course, be examined, said Mrs. Jensdottir. Although she could not say what would eventually be done, she pointed out that such a change would be a step forward, alleviating the admitted conflict between the nursery and classroom teachers dealing with pre-school children. Another measure being considered towards this end would be to offer special courses to these two groups in which they would be trained to teach six to eight year-old children. Then, also, since about 98 per cent of all six year-olds already attend school voluntarily, it is being considered to lower the compulsory school age by one year. This would facilitate the continuity, organisation and planning, obtaining teaching materials, etc., for the early years of schooling.

Innovations and their implementation in the schools

Professor Faulkes observed that many of the ideas and issues raised in the Report were not new to serious discussion in Iceland. The examiners had met an impressive number of educationists from many parts of the education system who were engaged in a lively search for innovations that could improve Iceland's schools. These same people, among others, expressed anxiety about implementation – the difficulties, scarce resources and other resistance, met when the time came to spread a good idea throughout the school system.

Professor Faulkes went on to cite a number of places – not meant to be an exhaustive list – in the school system that the examiners agreed were centres of excellence, places where dedicated work and openness to new ideas were evident: certain experimental schools, the Nursery School Teacher Training College, the Arts and Crafts College, the Special Education Institute, and the University College of Education. However, the examiners also came away with the impression that such examples were somewhat on the margin of the education system as a whole and that there were large areas in the centre of the system where things went less well, where there was a lack of apparent interest, much less enthusiasm, for new ideas among the teachers to make the schools as good as they could be. The examiners were also told of problems involved in bringing innovations to a point of general acceptance and practical adoption, an example being the integrated social science programme, apparently an important one for Iceland, that after many years of work has not been completed.

In answer to this question on the process for innovation and improvement in Icelandic education, *Mrs. Jensdottir* began by discussing conditions and factors that could be seen to limit this process in Iceland. For example, she suggested that the need for better education of the teachers themselves was an important source of the lack of enthusiasm among many of them. Among related factors to be overcome were the large number of unqualified teachers and high turnover among teachers, coupled with their need to be guided by teaching materials that were usually in short supply. Because Iceland represented a very small market for such materials, private companies refused to prepare them.

The integrated social science project, which represented a revolution both in the construction of teaching materials and methods, illustrated such difficulties, demanding far more human and financial resources than were available for its adoption by the system at large. The slow pace of the programme's implementation – 15 years in its development – left important gaps in the curriculum for many children, particularly in Icelandic history. Furthermore, these difficulties were added to by a failure to explain the programme to the public, particularly to parents. Thus, though suspended, this programme were now in the process of revision.

The experimental schools, though seemingly isolated, have in fact exerted their influence, the workers involved often taking the initiative. The University College of Education holds seminars on innovative themes and the Ministry has promoted co-operation and spread information on centres of excellence, particularly between different sectors of the education system.

When discussing school development in Iceland, continued Mrs. Jensdottir, one must stress that over the last two decades the compulsory school system had undergone major changes that were instituted in 1966. At that time the Ministry of Education undertook a general revision of the organisation and content – the curricula, teaching materials and teaching methods – of compulsory schooling. Experience had shown that despite a lack of expertise and experience and limited financial resources, the changes that had taken place had been largely successful. However, a number of continuing issues from this experience were instructive. First, democracy, extensive consultation with many concerned people – particularly teachers – brought realistic compromise, but were costly and slow. Second, such programmes always faced a lack of resources. Third, the objectives of a curriculum could demand more knowledge and skill than could reasonably be expected of the teachers at a given time. Fourth, such changes should involve the teacher training institutions more intensively.

Finally, concluded Mrs. Jensdottir, this experience in centrally planned and implemented programmes suggested that in the future there should be greater emphasis on local involvement and follow-through activities.

A number of issues with respect to pre-schooling was explored in questions and statements by Committee members and the Icelandic response. It was made clear (in answer to questions from the delegates from *Austria, Italy and Turkey*) that the aim to provide equality of service was behind the provision of pre-school services to any rural community that could come up with suitable facilities. Since 98 per cent of all six year-olds were now in pre-school classes this aim could be furthered by making it compulsory, which would facilitate giving all pre-schoolers the same resources and type of experience. However, interventions by the *delegates from Ireland and Norway* raised the question of what would be the content and character of this pre-school experience. The *Irish representative* was concerned that the unique content of nursery school teacher training should not be lost by submerging it in the preoccupations of academic university or ordinary teacher training, and the *representative from Norway* pointed out that there was no research evidence showing that *schooling* in a formal sense, when started at five or six years of age, had any positive impact on the cognitive performance of children when they were older. Subsequent discussion by the *representative from France* lent weight to the opinion that concern for such things as school environment, social setting and emotional support that are characteristic of nursery school training, yielded very positive results in the schooling of older children.

A second line of discussion raised by Committee members related to the strategies for innovation and improvement. The Icelandic authorities (*Mrs. Jensdottir*) reviewed their efforts to disseminate information on new developments through in-service courses at the University College of Education – and though not yet satisfied with Icelandic progress – were in agreement with *the German comment* on the importance of developing a support system for teachers, without which they are not likely to sustain innovation in education. Iceland also emphatically agreed with the formulation that the new social science curriculum could be made effective by bringing into it the great educational value of the work experience of Iceland's children outside the school.

All of these strategies were seen as contributions towards closing the gap between urban and rural education, an issue raised by *the Italian delegate*.

Language teaching and rural schooling

Professor Faulkes briefly introduced these two areas of questioning, pointing to the importance of language in the Icelandic curriculum because of the need for Iceland to *i)* preserve and develop its national language; and *ii)* communicate with a world outside that does not use this admittedly difficult language. Children in remote rural areas had the privilege of living in the midst of one of the most beautiful landscapes in the world, while in all else, compared to urban children, they were likely to be deprived. The Icelandic authorities, having shown their awareness of these problems in their Background Report, were invited to present further views on them.

Rural schools

The quest for equality in rural schooling was being approached, said *Mrs. Jensdottir*, along three fronts. First, the Ministry was working with teachers in small rural schools to discover the strengths, weaknesses and particular conditions of these schools and to assist their teachers in planning their programmes accordingly. Second, mixed-age group teaching was to be encouraged by preparing teaching materials along these lines. Third, there was a continuous building programme to increase facilities such as gymnasiums and vocational rooms; but, of course, this programme was limited currently by shortage of resources.

Language teaching

Most Icelandic young people could make themselves understood in Danish and English, said *Mrs. Jensdottir*, even though language teaching in Iceland may not be the most efficient. Accepting the burden of being able to take part in Scandinavian cooperation as well as in the larger modern world, now Icelandic schools began Danish in Fifth Grade and English in Sixth. A scheme that had been discussed would be to delay English for a year in order to allow Danish to be better consolidated. The elective fourth language, usually German or French, was encouraged only after Grade Nine (upper secondary school).

Such concentration on language left less time for other studies, but the idea of amalgamating foreign language and other subjects had only been attempted by some teachers in secondary schools, not at the compulsory level. Again, said Mrs. Jensdottir, this awaited appropriate teaching materials for the lower school level.

The delegate from Denmark reminded the Committee that all small countries had the need to learn at least one other language, often two or three, and the effective teaching of languages remained an international pedagogical challenge. For example, teaching other subject-matter in a foreign language was an alternative approach that might seem to save time, but one could not underestimate the strain on the teachers.

The representative from Sweden on the other hand invited the Committee to take an historical view of education that would show that in the light of the typical school attendance, schooling of six years had risen from the late 1940s to twelve years today. The hours given to foreign languages were well within the time available for a sufficient total curriculum. *The representative of Italy* added the opinion that language learning was as usable as a formative agent as any other educational experience, at least as good as any other field for promoting young people's advancement towards maturity.

Earlier *Mrs. Jensdottir* had rejected the suggestion from the Examiners' Report that translations of works from other languages into Icelandic hindered the learning of these languages, saying that such translations had become an important part of Icelandic culture. Furthermore, the sales of foreign books in Iceland were proportionately very high. However, Mrs. Jensdottir seemed to signal an acceptance of the end of a long educational era in answering the question posed by *the delegate from Germany*, whether the national tradition, continued until two or three generations ago, of informal teaching, particularly the teaching of basic literacy in the home, had any place on the current educational scene. She replied that the only informal education in Iceland today occurred not in the home, but in the young people's work experience.

III

UPPER SECONDARY SCHOOLS

Question 7:

The fact that there seems to be no final policy on what form Iceland's secondary schools should take, seems to be less significant than other issues that have been raised. These include:

- a) *Teaching that is often unimaginative, possibly partly due to the great amount of overtime teaching.*
- b) *Underqualified teachers in certain fields; particularly in rural areas.*
- c) *Excessively academically-oriented courses, little orientation to the labour market.*
- d) *But, however, too little relationship with the University for which the students presumably are being prepared.*
- e) *Insufficient relationship to the labour market and its agencies.*
- f) *High student wastage.*

The Icelandic authorities are asked to say what approaches are being made to these issues.

Question 8:

This review suggests that when the secondary school resources are viewed, not school by school, but as a whole, they might be treated as a system *of secondary education in which these resources might be pooled. Since the Ministry of Culture and Education has central authority, would there be ways to treat the upper secondary schools as mutually supportive parts of a system?*

Introducing questions 7 and 8, *Dr. Arango* described how upper secondary education in Iceland had been expanded without altering most of what already existed and thereby, while avoiding tensions in the system, creating a dual system of schools at this level. Thus, the authorisation of the local communities in 1973 to operate comprehensive secondary schools provided for broad and flexible growth at the secondary level, but parallel to the traditional academic grammar schools and vocational colleges, run directly by the State.

Beyond the issues discussed in the Examiners' Report, Dr. Arango reviewed the perceived need to both modernise and integrate these somewhat separated kinds of secondary schooling, making the following points:

- *i)* Much of the comprehensive school curriculum was academic, and some modernisation of the grammar schools could be in order, and such a move could lead to a gradual convergence between the two.
- *ii)* State authorities could also exercise their traditional functions to reinforce or create co-ordinating mechanisms and other measures to bring the work of the grammar and comprehensive schools closer together.
- *iii)* The internal management and particularly the governance of colleges (grammar schools) was not in line with the more representative forms in the comprehensive and vocational schools.
- *iv)* These kinds of developments should aim to increase the responsiveness of this school level as a whole to the needs of the pupils and of society.

Dr. Arango associated evidence of high levels of student drop-out and failure and raised questions both as to what might be a rigid examination system and the need, on the other hand, to raise standards of teaching at this school level.

Finally, Dr. Arango called attention to the earlier statement of *Mr. Hermannsson*, the Minister of Education, indicating that important developments for secondary education had taken place since the examiners' visit:

> "A curriculum for upper secondary education has been drafted (by the Iceland authorities) ... subject to experimentation in several schools in the coming academic year. Committees have been appointed with plans that go in much the same direction as we suggested, not meaning to imply, of course, any causal relationship. But we are glad to see that our views tend to coincide and we wanted to recognise and acknowledge this fact".

Mr. Larusson opened the Icelandic response to Dr. Arango's questions offering a detailed discussion of questions 7 and 8:

> "In order to understand the present situation in the Icelandic secondary schools it is necessary to look back at the situation as it was some 20 - 30 years ago. Secondary schools have had more freedom in their work than similar schools in most other countries. One or two decades ago, for example, the schools decided for the most part what the curriculum should be, and how the total number of teaching hours should be divided between the different subjects. At the time, the schools were very few, but as they grew in numbers, in spite of some co-operation between them, they remained relatively isolated and this freedom has not led to pedagogical development to the extent one could expect. In the last few years, as the number of schools has increased, this situation has changed and there is much more co-operation between the schools than before – and the staff of the schools want this co-operation very much – but still there are many who believe that the former situation should be kept unchanged.
>
> With reference to point *(a)* of Question 7, in the Icelandic secondary schools we find both imaginative and unimaginative teaching. No doubt there is more of the latter. In spite of this, more and more teachers are trying new methods and new materials. The Ministry of Education has encouraged teachers to find new and better ways in their work. For example, the Ministry has made it possible for the teachers in each educational district to meet twice a year so that they can discuss the curriculum, evaluation and other topics related to their work. They also exchange ideas and teaching materials and this gives them a valuable opportunity to share their experience with others. This has turned out to be very useful.
>
> Training, which is now the responsibility of the University, is very important in this

respect. The number of courses offered each year is increasing and in most cases they are attended by a great many teachers as shown in our Background Report. Working conditions in the schools play also an important role in this respect. This is now being examined in co-operation with the Teachers' Union.

As to point *(b)*, it is true that it is difficult to get qualified teachers, especially in the rural areas and it is also difficult to get qualified teachers in subjects such as mathematics, physics, chemistry and computer science. The main reason for the latter is that people having specialised in these subjects can easily get jobs on the private market which are much better paid than teaching.

This is a very difficult problem and there is no obvious solution. It might be a partial solution to improve the working conditions in the schools and offer the teachers in service better educational and training opportunities, thus making the teaching profession more attractive.

As for the issues raised under points (c) to (e), most teachers in the secondary schools, other than teachers in the vocational subjects, have an academic training in their subject and in addition they have taken a course in pedagogy. Since the secondary school teachers decide themselves what textbook to use and what the standard should be, the courses tend to be academically oriented reflecting the teachers' academic background.

If the employers are asked what education they want their employees to have, the most common answer is that they should have good knowledge of the mother tongue, foreign languages and mathematics. This attitude also contributes to making the courses more academic. However, this attitude seems to be changing. There are signs which indicate that more and more people, both in the schools and in the labour market, realise that this kind of education is only for some of the pupils and that society needs people with more varied education and training.

It is very easy for the young people, i.e. the 16-19 year-olds, to get a well-paid job. In fact, this group plays an important role in the labour market. Unemployment is almost nil in the country, and this is also true about this age group. After having completed compulsory education the students have to decide whether they should go into the labour market or continue their study – which, up to now at least, has not guaranteed better paid jobs in the future.

It is now generally recognised that this situation is going to change in the near future. The more complex society becomes and new technology is applied in the different industries, the more necessary it will be for every individual to have some secondary education and training.

Finally, a comment on Question 8. We believe that the suggestion made should be considered carefully. There is no doubt that the small schools, and other schools too, could benefit from the expertise which is available in some of our schools, mostly the bigger ones. In fact, this has been done to some extent in some of the educational districts. In these districts there is at least one big school that could help the smaller schools which do not have the necessary expertise in one or more of the subjects taught. As mentioned earlier, these teachers do have the opportunity to meet twice a year, so we therefore have some experience in how a system, such as you suggest, could be organised."

Discussion of a number of issues raised in the meeting (*the delegates from Spain, Germany, Switzerland*) related to upper secondary school structure, organisation and inter-level relationships, seemed to reveal a system still in the process of development. For example, a system of inspectors for upper secondary schools is at a point of initial discussion among head masters and teachers. The unit credit system by which students get credit for, or are obliged to repeat, only in the specific subjects taken, has become the standard in Iceland – though not yet accepted by some grammar schools. Standards for matriculation have been developed by each school individually in consultation with the University, but this procedure is now being formulated.

Some interesting questions (*from Switzerland and Belgium*) on student behaviour were also raised: the high drop-out rate in certain subjects – chemistry and math – and the fact that students not infrequently leave and later return to comprehensive high schools, but seldom do drop-outs return to grammar schools in Iceland.

However, the largest discussion turned, as formulated by *Mr. Gass, Director for Social Affairs, Manpower and Education*, on the upper secondary school perceived as the key link between the schools and the world of work. The outstanding features of this linkage in Iceland are, as re-emphasized by *Mr. Larusson*, the students' early contact with the work experience before school-leaving, and the ready availability of work as an alternative to school after age 16. Thus, the questions of negative school structures, examination barriers, the 30 per cent secondary school drop-out rate, the 50 per cent drop-out of university entrants – all must be viewed in terms of the *attraction* of jobs in a labour market with little unemployment. However, Mr. Larusson said that the schools could still examine their offerings in terms of making them more appropriate to the work young people are entering, possibly shorter courses than now offered.

Furthermore, *Mr. Larusson* responded to questions *from Australia and Switzerland*, saying that in fact in today's world students in academic secondary schools still had too little knowledge of the complexities of working life. Information is made available in the schools, but does not yet correspond to the kind of syllabus outlined by *the Australian representative*, that would methodically "draw generalisations and interpretations from the students' experiences in the world of work".

Mr. Gass had introduced the idea, being discussed at the University of Iceland and elsewhere, that education should begin to respond to aspects of the economic "culture" in which people must learn to function – giving the example of what is often called the "entrepreneurial culture". There are, of course, other sectors and aspects of the culture of modern production. *Mr. Larusson* said that Iceland had not yet developed work along this frontier.

IV

TEACHER TRAINING AND THE TEACHING PROFESSION

Question 9:

Given the fact that no major expansion of the system is foreseen; that, therefore, the present teaching staff is likely to represent the majority of the teachers in the near and not-so-near future; taking into account the rapidly changing demands arising from a society undergoing sustained evolution; bearing in mind, finally, the generally recognised shortcomings that affect and have affect initial teacher training, should in-service teacher training constitute a major priority and concern for the authorities, more so than it seems to be at present? Along with summer seminars, which often may be too short and which do not lead to permanent seminars or working groups, has the Ministry considered the usefulness of promoting in the near future other structures or schemes of in-service training, such as Teachers' Centres, as they exist in other countries?

Question 10:

The Teacher Training College has announced plans for changing the content of its programme and increasing its course to four years. However, the idea of reform for teacher training does not seem to extend to that given at the University for secondary school teachers. The question has been raised whether it would not be more effective to have all professional teacher training consolidated in one place – in this case, at the College. In this way the orientation towards the professional aspects of teaching, which are as demanding for adolescents as for young children, would be consistent among all teaching levels. Are there any plans for such consolidation? Could we have more information on the nature of the proposed new programme for teacher training in the College?

Question 11:

We had argued strongly that, given the importance of formal education for the coming period of Icelandic development, the low status of teachers – reflected both in their levels and in the notion that their work involves little professional input that is either demanding or unique – is now untenable for Iceland. We would like to invite the Icelandic authorities to discuss the admittedly complex factors involved in this issue.

Professor Faulkes presented the examiners' questions covering three main areas of concern.

i) Although teacher training in Iceland has notably improved through efforts over many years, there is still a great demand for in-service training, particularly in the light of there being many underqualified teachers. Much that is now given is in the form of short courses of a few days' duration, and these are not yet sufficient. Is there a priority for providing in the future longer courses, courses based on in-school experiments, etc?

ii) The plans for revamping the teacher training programme are likely to involve both the University College of Education and the University of Iceland. In what measure could this result in an exchange of expertise, in which the strong points of each institution are combined in the new programme?

iii) The level of teachers' pay, and particularly their pay relative to other professions, is an issue of most concern to teachers in Iceland, as in many countries today. This seems to be closely related to the question of the public regard in which the teachers are held, and this question may be at the heart of many other problems in this field.

Mrs. Jensdottir presented the Icelandic position on *in-service teachers' training* saying:

"A major priority should certainly be given to teacher in-service training and as a matter of fact we welcome the proposal to strengthen the recurrent in-service sector as a part of the overall professional education for teachers. In winter 1985, the University College of Education passed a policy resolution to augment the in-service training department of the College, putting more emphasis on innovation and professional consultancy geared towards the Regional Education Offices and individual schools that show interest in innovation and are able to present realistic plans for work of this kind. The co-operation with the Regional Education Offices might develop into Teachers' Centres as mentioned in the Report. The main aim of this effort is to bridge the gap between the College and the actual work in the general school. As a result of the new policy a reduction in the numbers of the proportionally short summer courses is foreseen.

In Iceland, in-service training is voluntary and we do not plan to change this. In-service training courses have been too short to give the teachers credit that would raise their salaries. By offering fewer and longer courses, as suggested in the Report, we could give credits that were sufficient to warrant a pay increase, thus making the courses doubly attractive to the teachers.

We are trying to increase the financial support for an expanded programme of in-service training, including short courses that are popular with the teachers and school-based training."

On *teacher training* Mrs. Jensdottir outlined the Icelandic response as follows:

"The statement in your Report that effective teachers are those who have their own education developed to the highest level possible, while at the same time receiving appropriate theoretical and practical instruction in pedagogy, reflects our own views, but how are we to reach this desirable goal?

The Ministry of Education is now having the whole question of teacher training looked into. Everyone agrees that co-operation must exist between the University and the College of Education, but to what extent and in what form? On this opinions are divided. This has been the case since teacher training in Iceland was brought to university level in

> 1971. One of the changes that has been discussed intensively is to concentrate the study of educational theory and psychology and of methodology and curriculum studies in the College while all students of education would follow courses in their special fields of study at the University. But, as stated earlier, we have not reached a conclusion on the course the co-operation between the College and the University should take. All agree, however, that it should be increased as this is essential if we are to succeed in improving the education of teachers at all levels of teaching. To quote the Rector of the College of Education, Jonas Palsson, 'While it is essential to improve the social status of teachers and pay them higher salaries, it is equally important for education to lift itself up to warrant this recognition, and to achieve this end nothing is more relevant or more important than working for better quality in teacher education and improving the working conditions of teachers in the schools'.
>
> Within the University College of Education revision of the content areas of the three-year programme is now taking place involving its execution in academic, professional and practical terms. Among the proposals under discussion is lengthening the course to four years, with more emphasis on deepening the students' knowledge in single traditional subjects and putting the teaching of the mother tongue on a more secure basis along with an introduction into relevant aspects of our culture. Pre-service programmes are also being discussed, as the classroom experience of our graduate teachers is found to be insufficient. The College of Education also has plans to widen its post-graduate programme, now consisting only of a course in special education."

Mrs. Jensdottir concluded by noting that since some of the proposed new work for teacher training might be done at the University, this programme was at a cross-roads.

Teachers' salaries involved bargaining with the Ministry of Finance, said *Mr. Larusson* as he opened the discussion on this subject. "The Ministry of Education is only indirectly involved". He continued:

> "During the last few years, the major role of the government has been to decrease the inflation which has done much harm to the economy of Iceland. Part of this endeavour has been to keep the increase in salaries as low as possible because, according to the experience of the past, higher salaries have led to higher prices and greater inflation. In all wage negotiations which took place in the period 1980-1984, emphasis was laid on increasing the salaries of those who had the lowest salaries and this is to some extent reflected in Tables 1 and 2 of the Examiners' Report. It has also been considered important to keep the ratio between the salaries of the different working groups employed by the State unchanged. This is because if the negotiating parties decide to increase the salaries of one group more than the others, experience has shown that the other groups will get a similar increase in salary sooner or later. Teachers are about ¼ to ⅓ of those who are employed by the State, and since they are such a big portion of the State's employees, it is considered very difficult to increase their salaries without serious consequences for the economy of the country.
>
> According to information obtained from the Ministry of Finance, the development in salaries has changed during the two years from 1984 to 1986 in such a way that the salaries of the staff of the hospitals and of the teachers have increased slightly more than the salaries of other classes.
>
> There is no doubt that the present situation is untenable for education in Iceland, but there is no simple solution to the problem. The Ministry of Education has begun to discuss this matter with the Teachers' Unions in order to examine the possibilities of changing

the situation. The most important factor in this field is probably to lift the education to a higher level so that its importance for the individual and for society will be generally recognised and, also, to deepen the teachers' professional skill, which will certainly contribute to improvement of their status in society."

In conclusion, Mr. Larusson pointed out that the discussions between the Teachers' Unions and the Ministry of Education deal with many factors other than pedagogical ones. Lengthening and strengthening teacher training and in-service training, sabbaticals for the further education of teachers and the new Law making it more difficult to hire unqualified teachers, all point in the correct direction towards "recognising theirs as a profession, not a job requiring no special training".

The delegate from Canada (Nova Scotia) perhaps expressed the general conviction of the Committee in its discussion of teacher issues: that the performance of teachers is the main determinant of quality in education. However, the discussion left no doubt that the comprehensive character of the Icelandic presentations had revealed the complexity of the subject – leading to great uncertainties and to no easy answers. Nevertheless, a general strategy, aimed at improving the performance and the lives of teachers, did seem to emerge, having the following four elements:

i) The development of teacher training by means of collaboration between teacher training centres and the University should be (*the delegate of the United Kingdom*), but at the same time, the subject of thoughtful, even sceptical enquiry (*delegates of Ireland, Canada*). It is obvious that each type of institution has particular contributions to the development of teachers, but new programmes aiming to take advantage of these increased institutional resources confront the lack of agreement as to the correct content of the teaching profession.

ii) The uncertainty of initial teacher training and the large proportion of younger teachers who will remain in the schools for many years (a circumstance in Iceland and many other countries), means that in-service training is a second and indispensable part of a strategy for the improvement of teaching. The teacher training institutions, University and Ministry, as well as trade unions and the work-world can all contribute to in-service programmes. When they are widely available in many forms in order to involve many teachers and head masters, these programmes can particularly stress close participation in the daily work of the teacher (*delegate of Canada*).

iii) Appropriate teachers' pay levels (and status), as revealed in the Icelandic presentation, and subsequent discussion, is the third, but least independent, pillar of this strategy.

With respect to this third aspect of a general strategy for teacher development, a number of unresolved questions were raised and left for future consideration. For example, *Mr. Papadopoulos, OECD Deputy Director for Education*, pointed out that the Icelandic arrangement in which teachers' bargaining on pay is conducted with the Ministry of Finance, and without direct Ministry of Education involvement, represents a splitting of government authority relationships to the teachers that might have some important advantages. The brief Committee discussion indicated that teachers usually find themselves in the opposite position, namely, of "bargaining against members of their profession who happen to have taken jobs in the Education Ministry".

Another example of a question calling for further work – again raised by Mr. Papadopoulos – was the usefulness of international comparisons of teachers' salaries. *Mr. Larusson* said that factors, in particular national circumstances, made such comparisons of little use. However, *the Canadian representative* confidently reported that Canadian teachers are "among the highest, if not the highest, paid teachers in the world" (which, incidentally, he said, did not make them the happiest teachers in the world). However, within any given country, teachers' pay levels, relative to other professions, may still be a useful indicator.

Another problem for which no clear answer emerged was *the shortage of science and maths teachers* who are attracted by the superior wages offered in other (usually private) sectors. Some authorities (in the United Kingdom) are looking towards "flexible" pay scales to attract and keep such teachers, but seem not to have made much progress. The only other approach suggested by Iceland was to offer science training to underqualified teachers now in the schools.

The Icelandic authorities' approach to the improvement of science teachers and teaching does seem to emphasize their main approach to the wage question within a general strategy for teacher development: namely, to work, through training and development, to improve the competence, effectiveness and professional morale of the teachers in place as the platform upon which to build their status in society. Then the higher rewards, including monetary ones, can possibly come with this higher status.

Of course, on questions of teachers' comparative wages, Iceland must reckon with the special "problem" of national egalitarian values that *the Icelandic Ambassador, Mr. Kroyer*, illustrated by recounting a story from an earlier year when a Prime Minister's chauffeur, because he had a licence to drive a taxi, had bargained for a higher pay than his boss, who did not have this qualification.

iv) A fourth aspect of the strategy for teacher development was emphasized in the reply of *the Icelandic delegation* to an extended intervention by *the representative from Canada* (Nova Scotia). *Mrs. Jensdottir* and *Mr. Larusson* reiterated the Icelandic policy, both to examine the educational experience of other countries and to adapt – not simply copy – this experience to Icelandic needs and conditions. However, this intervention brought into focus a number of questions that had been raised (by the *delegates of Iceland, Norway, Germany*) about the actual educational basis for widely-accepted school practices and organisation – for example, questions on the timing of schooling – and these questions represent another hurdle for teacher policy. They show that programmes for the development of teachers are vulnerable because of the ambiguities of the knowledge base brought to the practice of teaching. Strengthening this knowledge base, an aim that is prominent in the programme of Iceland's College of Education, can be seen as a fourth essential element in this teacher strategy.

V

THE UNIVERSITY OF ICELAND

Question 12:

The development of the University in the past 15 years has been a great accomplishment. However, now it gives the impression of trying to expand in all possible directions of specialisation, and without having the necessary resource or population base, might be spreading itself too thin. The University might need to choose certain emphases, for both research and teaching, those that relate to Iceland's strengths and needs, its history, geographical and economic positions, etc. These emphases might well cross rigid disciplinary and specialist lines. To what extent do Iceland's authorities share these perceptions? For example,

a) *Do the authorities feel that the time is perhaps ripe for the introduction of Ph.D courses – in certain specified areas – at the University of Iceland?*

b) *The rigid structure of the University, and its apparent lack of internal adaptability, appears to inhibit much potential research, particularly in interdisciplinary areas. Are there plans for introducing greater flexibility into the system, for purposes of the development of more varied research and teaching?*

Question 13:

Are there any plans to develop mechanisms for setting priorities, coordinating and supporting:

a) *general research policy?;*

b) *research for the field of education?*

Question 14:

The quality of teaching seems to suffer from a lack of bases in research conducted by the University teachers. And the quality of both seem to be negatively affected by the great amount of part-time teaching at the University. Is there any approach being taken to these problems?

Question 15:

Student performance and high drop-out rate (50 per cent during the first year) seem to be affected by such factors as:

a) *Immediate specialisation during the first year, rather than a general first year to broaden the student's horizons and future choices (which would require a 4-year first degree course).*
b) *Teaching methods emphasizing large lectures.*
c) *The student loan system that does not reward achievement.*

Are there steps being contemplated in any of these areas?

As Iceland's only University, said *Professor Robinson*, introducing this topic, a true ***universitas rarum***, the University of Iceland qualifies as a unique national resource. Professor Robinson briefly referred to the University's impressive growth and accomplishments, that are detailed in the Examiners' Report, such as its academic range and the near equal number of women on the campus, and went on to outline the main areas of concern that the examiners felt deserved further thought. In summary these were:

i) Interdisciplinary orientation and work, which is where the frontier of scientific and research progress is to be found today, seem precluded by the University's segmented and rigid course structure.
ii) There is relatively little post-graduate work, when in fact the University, and Iceland as a whole, could benefit from PhD programmes in fields reflecting Iceland's particular competences and national circumstances. Such fields could include, for example, old Icelandic studies, in which Iceland has an impressive scholarly base for making a world contribution; geophysics, taking advantage of Iceland's physical structure; engineering, specialising in the general area of building structures in "hostile" climatic environments.
iii) A major part of the total quantity of teaching seems to be covered by part-time teachers, who are in fact engaged in other activities. This situation seems to suggest that there is little time left for research even though this is supposed to occupy 40 to 60 per cent of professors' time. It was not apparent to the examiners that the University had any means for self-examination of the quality of research and teaching.
iv) Is there an overall plan for university research, and a set of priorities within that plan? For example, specifically a priority for research into the nature of the education system itself?
v) The relationship of the University to the Icelandic community as a whole seems somewhat distant. For example, there seem to be few part-time or extension courses by which the University would reach out the general Icelandic community.
vi) There is a 50 per cent drop-out of first-year students, and only 25 per cent actually complete a first degree. Could an additional unspecialised first year, devoted to orienting the students, be one way to change this picture?
vii) The large lecture is the predominant teaching method at the University, and this is generally recognised as inferior to seminars and other schema in which the students take a more active role.
viii) There seems to be no system of incentives or rewards for exceptional achievement, for example bursaries to students on the basis of scholarship. The excellent system of student loans, open to all, fulfils a different role, but the examiners expressed a

concern that, as with other forms of encouragement in place, this ready financial support could serve for some students as a disincentive to a drive for excellence in scholarship.

Dr. Gudbjarnarson, Rector of the University of Iceland, presented an overview of developments and policy in this field. He reviewed the history of the University as a necessary background for current thinking. Founded in 19111 with schools of Theology, Law and Medicine, it grew very slowly: from 45 students in 1911 to 1 500 in 1970. In 1969-1970 a more rapid expansion of the University was decided upon to meet the country's needs for modern sciences and engineering. In order to staff these new facilities, the University had to reach out to existing research and university bodies from both inside and outside Iceland, bringing in Icelanders trained in various centres in Europe and North America, all, therefore, with different training and backgrounds; "and all, incidentally, convinced of the rightness of their own ways of doing things". Dr. Gudbjarnarson himself was one of those so recruited (to set up the Department of Chemistry) after his training in Munich and ten years' work in universities (Faculty of Medicine) in the United States.

However, this multinational training background of the University's new faculties gave it the strength of variety and made it the scene of endless and lively discussion and debate. Furthermore, the undergraduate programmes established since 1970 were oriented towards making the students' work transferable to universities in Scandinavia, Great Britain, Germany and North America, and it can be reported that these Icelandic students have been doing very well in their post-graduate fields.

Beyond this measure of success, the University of Iceland was establishing internal and external review committees aiming to evaluate its work in various fields. After a period of time when certain shortcomings, already recognised, were corrected, the plan was to include international participation in such committees.

The period from 1970 to 1978 was largely devoted to establishing the University's teaching programmes, for which there was substantial financial support. After 1978, when further expansion was meant to foster research activities, the support declined and both manpower and facilities has been enabled to grow only very slowly. As a consequence in each of the disciplines the University still had only what could be called a "skeleton crew" and, therefore, the University had been reluctant to stretch itself too far into post-graduate-level work, at least beyond the masters' level.

The emphasis was now on strengthening existing programmes and to develop post-graduate programmes (MA and MS) in areas where only undergraduate education was available. This represented a major effort, it required increased staff, improved research facilities and increased research funding. The University was resisting attempts to spread resources too thin by expanding into new areas or by developing extension services or separate campuses in other parts of the country.

As the examiners had noted, the introduction of PhD courses in very selected areas such as Icelandic Studies, Geology/Geophysics, and Geothermal Engineering was warranted, but the time for PhD courses in other areas was not ripe. The staff and resources were insufficient and at present it was important to educate and train young scientists at the best universities available. They would then serve as prospective faculty members.

The University of Iceland provided an opportunity for qualified scientists to submit a doctoral thesis to any faculty of the University. The faculty appointed a three-man *ad hoc* committee to evaluate the thesis. If approved and accepted by the faculty, the candidate would have to face two appointed opponents and defend his thesis at an open ceremony. This procedure might be out-of-date but it still encouraged investigators to submit their doctoral thesis.

The University did now also need to reach out to the larger community, said Dr. Gudbjarnarson, and was searching for ways to meet a growing demand for adult education and extension courses. For this purpose distance learning techniques were being investigated.

Dr. Gudbjarnarson pointed out that, whatever the rigidity of the University's administration of teaching, it was separate from research and did not affect it. There were no formal barriers to interdisciplinary work, it being up to the individual to walk across to other disciplines in his research. However, there might be a difficulty here in terms of teaching. This could partly be alleviated by the fourth year now offered as an additional year to the three-year BS programme in which a student was encouraged to take courses in other faculties which will broaden his/her education. A list of a wide selection of practical and theoretical courses was provided, indicating their possible usefulness for future careers, either in further studies or in specific areas of the labour market.

With respect to research policy, the most fundamental aim was to make it possible for professors to do more research. One of the first steps would be to reduce the overtime spent in teaching, that was a reflection of a low basic pay rate, shifting this overtime work into research work.

The research policy of the University emphasized: *a)* increased allocations for the Research Fund and increased support for research on project bases; *b)* increased and improved communications with the general public on the subject of research and science; and *c)* an effort to increase the application of research and development in the Icelandic society at large.

For basic research, faculty members were free to do whatever research they wanted. However, in applied research there were priority areas that reflected Iceland's greatest needs or perceived points of opportunity. These priorities made up an interesting list: food technology and processing; fish-farming; bio-technology; computer sciences – for example software for the control of geothermal processes and fish-processing plants; electronics, for fish processing, etc.

Questions of teaching and student relationships to the University required careful assessment, continued Dr. Gudbjarnarson. Part-time teaching was, in fact, not as large a proportion as the figures indicated. There were four categories of part-time teachers: students; scientists in university research institutes, whose main work was research; professionals from outside the University; teachers on short-term contracts. The latter group represented only 30-40 teachers who did about 10 per cent of the part-time work. The students and scientists from the institutes were really members of the University staff. If so included in the numbers, then two-thirds of the teaching was done by University staff. The contribution of the professionals from outside the University provided the University and the students with very valuable relationships to various spheres of the professional and industrial world.

The Education Committee of the University was exploring ways to reduce the lecture load on teachers and students. Preparations for extensive evaluations and review of curricula and performance of individual faculties were under way.

"Student drop-outs are a problem for the University", said Dr. Gudbjarnarson, "but I don't know if it is a problem for the students!". It was an old and common practice for students to enroll in the University after matriculation from secondary schools. Many of the students had not at this time made a decision as to what or where they would study or if they should take a job before going to the University. The entrance fee was negligible ($75) and in this way they had a place at the University, should they actually decide to study there. One-fourth of the freshmen never entered the University. The University, however, was obliged to assume that registered students were coming and to provide facilities accordingly.

The University was beginning to study the students, their needs, where they went, and what could be done about the drop-outs. "It is quite true, however, that we must improve our services to the prospective students", said Dr. Gudbjarnarson. It was important to assist the students in making choices for the future. The University was preparing clearer definitions of the requirements students were expected to be able to meet when they entered the various faculties. These would list the specific requirements, define the foundation with respect to knowledge and skills which the student should possess in order to be able to succeed in the University. The listed requirements should also serve as a guide for the secondary schools.

It was from this standpoint that Dr. Gudbjarnarson ruled out the need for a first year of general studies and orientation in the University, saying that this was the task of the secondary schools in Iceland, functioning actually as junior colleges. The efficient course chosen here was for the University to help them to play this role. The alternative, to create a four-year first degree in the University, would mean accommodating 1 500 more students for which there would not be the facilities for years to come. And the cost to the students, who would have to move to Reykjavik for that year, would also be appreciably increased.

Dr. Gudbjarnarson concluded that the examiners' suggestions were extremely helpful in pointing out questions that "we actually have to deal with, some that were being dealt with, and others that are just now being studied".

From the relatively shorter time available for the Committee to respond to this presentation on the University of Iceland, a number of significant points could be recorded. First was the proposition offered by *the representative of Italy*, and agreed to by the Rector of the University, that a university was only a university if its teachers were engaged in research. He furthermore linked this idea to Iceland's desire not merely to copy the education and culture of other (larger) countries: the strength of the research done locally assured that the community could engage in the thinking required for its cultural independence.

Dr. Gudbjarnarson outlined the practical steps being taken by the University, including going directly to the broad community, to secure the funds necessary to support such research. However, he also gave recognition to the observation made by *the Netherlands representative* that the higher education system needed a balance between such work and non-university technical colleges, based in the community. He indicated tentative plans to expand this kind of college in Iceland, locating some of them possibly in regions outside the capital city.

As another small country, one also with a cultural tradition of outstanding significance for the beginnings of Western society, *Greece* was shown by its representative to have a contrasting position to that of Iceland. If Greece concentrated on its strong points in which it could attain excellence most readily, there would be, he said, such things as hotel and farm management, archeology and the merchant marine. "But the youth in Greece have other dreams – to be doctors, biologists, symphony orchestra conductors – which if not fulfilled at home will be elsewhere, and we lose them forever". Historically, 6 million people had been lost to Greece. Thus, excellence for a small country in close touch with the rest of the world could have other meanings. *The delegate from Greece* wondered if it might be possible for the small countries who achieved specialised areas of excellence to come together to combine them for a better world.

VI

ADMINISTRATION, FUNDING, PLANNING AND THE COMMUNITY

Question 16:

Sufficient personnel to provide for supervision and supervisory functions to the schools seems to be lacking at both the central and regional levels. What solutions to this problem are being considered? Could they involve an in-service training scheme, for example?

Question 17:

The comments and recommendations contained in the Examiners' Report suggest or imply many needs to:

a) *increase funding;*
b) *consider major alternative restructuring measures for the school system.*

Also, all of these kinds of measures should be related to education objectives, social priorities and pedagogical considerations. Are the authorities concerned with establishing a planning function for education that could methodically deal with these issues?

Questions 18:

More specifically, there seem to be many points at which Iceland's education system could "tightened up" by possible structural changes. For example, could the 13 years now required for compulsory and secondary education be shortened by a year? Could the educational process benefit by a longer year and/or longer school days. Could compulsory school begin at age six, rather than seven? Could some classes be larger? Such changes, of course, have many implications and consequences, but could they be usefully explored?

Questions 19:

The final section of the Report suggests that for Iceland's schools to capture the vitality that it can gain from the community, they would have to establish close relationships to:

a) *the family,*
b) *the labour market, and*
c) *popular participation in the arts. If Iceland's authorities in some measure accept this perspective, would they comment on what could be its practical consequences?*

Because of a shortage of time, this question was not discussed during the review meeting. Mr. Arango made a concluding comment, followed by Mr. Hermannsson who offered final remarks on behalf of the Icelandic Delegation:

Mr. Arango spoke for the examiners in saying:

"We should be rather sceptical about ourselves. We do not know very much about the uses of education and the results of any particular strategy or structure. It is clear to us that the overall results of education in Iceland are very good. As Mr. Gudbjarnarson pointed out Icelanders abroad do as well as the students of most other advanced countries. In our view and experience, Icelandic society is an educated one and is more balanced and integrated than most, and probably among the happiest. However, we can all agree that even here there is room for progress and if even one of our comments turns out to be useful, we will feel that we have paid back a part of the debt that we incurred in Iceland."

Mr. Hermannsson concluded the review meeting with the following remarks.

"I hope it has been clearly expressed in our replies that we are aware of most of the problems you have emphasized and they are either under discussion or endeavours are being made to solve them. Some of the solutions, however, are expensive and our ability to increase our spending on education is limited. We, for example, fully realise the importance of our teachers and their invaluable contribution to society, but as all of you are aware, there are difficulties in raising teacher salaries out of context with the salaries of other professions and in other fields of the labour market.

We can agree with the Report that our education system is deficient in some areas; however, we do not feel that it is inferior in any significant way to that of our neighbouring countries.

Your criticism, although rather harsh at times, will not make us lose heart, but, as certainly intended, will invigorate our endeavours to improve our education system.

The discussion here has been very stimulating and, as I mentioned earlier, we will translate the final report into Icelandic and use it to encourage discussion and involvement of the general public in our strife for quality, equality and excellence."

⁂

The following comments were presented in writing by Mr. Larusson and cover the Icelandic Delegation's answers to questions 17, 18 and 19.

Question 17:

"We believe that satisfactory planning for the education system is very important. Up to now there has been very little planning, with the exception of the compulsory school. When the Law on compulsory education was passed in 1974 careful planning was done on that stage.

"Up to now the main handicap in such planning has been a lack of data about the school system. We hope that this situation is now changing with a systematic collection and processing of data from all parts of the education system. The goal is for it to be possible at any time to evaluate the situation in any sector of the system and, also, in the system as a whole. In general such an evaluation should be the responsibility of the Ministry of Education and of consultants from relevant interest groups.

"We believe that the actual planning should not be in the hands of any permanent body outside the Ministry, but rather done by *ad hoc* groups appointed by the Ministry.

"Unfortunately, the economic situation of the country has not allowed any increases in spending on education in the last few years, and although the shape of our economy is a little better at the moment, it is hard to visualise substantial increases in spending on education the next few years."

Question 18:

"It is possible that the education system could be tightened up by structural changes. Certainly the question about the 13 years of compulsory and secondary schooling has to be investigated. We have to examine whether shortening the two stages by one year can solve any problems and what implications and consequences it would have. For example, this would probably lead to a costly restructuring of the University. In this respect there are other alternatives which have to be taken into account.

Could the educational process benefit by a longer year and/or longer school days? "We do not believe that the educational process would benefit from a longer year. A few years ago we compared the number of school hours per year in Iceland and other Nordic countries and the difference was not significant. It is possible that a longer school day could be a benefit for the school work; though maybe it would require a reorganisation of the school work.

For the question: "Could compulsory school begin at age six, rather than seven?", we refer to the answers related to the schools in Chapters II and III.

Could some classes be larger? "Of course, some classes could be larger. A few years ago it was decided by the government that the Ministry of Education should save a certain amount of money in the school system. It was proposed that the number of pupils in each class should be increased. The local authorities, parents, and teachers protested very strongly, so this proposal was withdrawn. It must also be borne in mind that this is only possible in the larger cities."

Question 19:

"We fully agree with the suggestion that it would be beneficial to our school system to establish closer relationship with the family, the labour market and the arts. We have been working towards this end and will be doing so in the future. The school must take an active part in society, and by systematically working towards closer relations with parents and the labour market there will be established an interaction that can only be beneficial to all those concerned. Closer links with the labour market will make it easier to prepare the pupils for the various occupations in our future society and it is also important to involve the firms directly in the education process, including participation in certain school programmes.

"We are especially aware of the need for closer relationship between the school and the family, as the schools have to an increased extent been taking over a part of the education and guidance which before rested with the home. A working group set up by the Ministry has made proposals on how closer ties between the school and the family could be established. These proposals are now being examined by all those concerned.

"We also find the idea of increased participation in the arts in the school system challenging. But we cannot agree that the situation, at least in the primary school, is as bleak as you paint it, i.e. that we are educating passive consumers. This year the capital city of Reykjavik celebrates its 200th anniversary and because of this exhibitions were held in all primary schools in the city and the things on display were all made by the pupils, and we are sure that you would have changed your mind had you seen some of these exhibitions, where the children's initiative, imagination and creativity were very strongly expressed."

Part Three

THE EDUCATION SYSTEM OF ICELAND

(Summary of the Background Report prepared by
the Ministry of Culture and Education, Reykjavik)

THE EDUCATION SYSTEM OF ICELAND

1. THE SCHOOL SYSTEM

The school system after 1974

In accordance with legislation 55/1974, the school system is divided into three levels: compulsory, secondary and post-secondary. At the compulsory level there are primary schools. At the secondary level there are secondary comprehensive schools, secondary colleges and vocational schools. At the post-secondary level there is the University and other comparable institutions.

Instruction in all schools is free and students at the compulsory level receive free educational materials. Private schools are financed to a large extent out of public funds.

The primary school

Law No. 63/1974 applies to primary schools. Primary school is for children and adolescents between the ages of seven and sixteen. The school provides basic education and prepares pupils for education at the secondary level. Primary schools are operated jointly by the State and the local communities.

By law the local communities are allowed to establish, as a part of the primary school and under the supervision of that body, a pre-school for 6-year-olds or 5- and 6-year-old children as long as the Ministry of Education approves their curriculum, housing and other facilities.

During the school year 1984-85, 210 primary schools operated throughout the country. Most of these also had pre-school classes.

School populations vary greatly. In school year 1984-85 there were 19 schools with 500 pupils or more, or a total of 13 030 which is 35.7 per cent of all pupils at the compulsory level. On the other hand there were 44 schools with 25 pupils or less, or a total of 630 pupils which is 1.7 per cent of all pupils at this level. Of these 13 schools had 10 children or less.

Most of the schools are day schools. There are only 34 boarding schools with a school population of 2 010; just over half of the pupils attend boarding schools as boarders, the rest attending for the day only.

Secondary schools

The secondary school level spans four years. So far legislation does not apply generally to secondary education but only to individual schools or types of schools. Many different types of schools operate at this level, all of which have the general aim of preparing students for a particular occupation, or for education at special schools or at the University.

In the autumn of 1984 about 70 per cent of the age group started their secondary education immediately after completion of compulsory education.

The main types of schools are secondary colleges, commercial schools, secondary comprehensive schools and vocational schools. In school year 1984-85, 27 per cent of the students attended secondary colleges, 35 per cent secondary comprehensive schools, 25 per cent vocational schools and 13 per cent other schools.

Higher education

At higher education level there are mainly two institutions: the University of Iceland and the University College of Education. The Technical College of Iceland and the Agricultural College at Hvanneyri also have departments with university status.

Like other institutions in the country, the University of Iceland and the University College of Education are financed by the State in the annual budget. In all other respects these institutions are very independent in their operations.

2. ADMINISTRATION OF THE SCHOOL SYSTEM

The Ministry of Education

The Ministry of Education supervises all educational affairs in Iceland with the exception of a few schools that come under other ministries. Thus, schools in agriculture are under the auspices of the Ministry of Agriculture and a few institutions that train people to work in health institutions are supervised by the Ministry of Health.

The chief officer for educational affairs is the Minister of Education. The head of the Ministry of Education is the Secretary-General who supervises all projects carried out by the Ministry or under its auspices.

The Ministry has three main administrative branches: the Office of Higher Education and Cultural Affairs, the Office of School Affairs and the Office of Financial Affairs. Each office is run by a divisional head and subdivided into departments.

Compulsory education

The country is divided into eight Educational Regions. In each region there is an Educational Council with 5-7 members appointed by the local communities. In each Educational Region there is a Regional Office of Education headed by the Regional Educational Officer who is a representative of the Ministry of Education and the local communities.

The representatives of the teachers union within each district attend meetings of the Educational Council and are allowed to participate and make suggestions. The Educational Councils organise all instruction at the primary level in their areas.

Within each Educational Region there is one or more school districts. School districts are established by the Ministry of Education in cooperation with the Educational Council, municipal authorities, school boards and the heads of schools. In each school district there shall be a school board elected by the municipal authorities.

The head teachers supervise the administration of the schools. In those schools where there are at least eight teachers in addition to the head there shall be elected a teachers' council of three, who assist the head in administrative affairs. In smaller schools staff meetings replace teachers' councils.

In schools with ten teachers or more the Ministry of Education appoints assistant heads on the basis of proposals made by the school board, the head teacher and the teachers' council.

Secondary education

The administration of secondary schools is in the hands of the Ministry of Education. Two departments within the Office of School Affairs deal with matters concerning secondary education: the Department of Secondary Education and the Department of Technical and Vocational Education.

Secondary colleges

These schools are operated directly under the supervision of the Ministry of Education as they are state schools. There are no school boards for these. The Principal sees to the daily administration of the school and he is the chairman of the school council which, apart from him, consists of the vice principal, two representatives from the teachers and two representatives from the students.

Secondary comprehensive schools

These schools are operated jointly by the State and local communities. A school board operates in each of these schools consisting of representatives from the local communities in question.

Vocational training

The Ministry of Education supervises vocational training in the country as for other forms of education. A Council of Vocational Training acts as an agent for the Ministry in seeing to it that instruction in this area can be carried out in accordance with the laws and ordinances.

In each school there is a school board appointed by the Ministry of Education. On each board there are five representatives, three of whom are appointed by the local community in question, one by the students and the chairman by the Ministry.

Higher education

The Ministry of Education supervises the administration of university-level institutions. The Department of Higher Education and International Affairs is responsible for their governance in so far as they concern the Ministry.

The University College of Education

The rector supervises the daily administration of the institution. He is elected by the committee of school administration from among permanent members of staff for a period of four years.

The council consists of the rector, one representative from each department of the college, one representative from the temporary staff and three representatives from the student body. The role of the council is to assist the rector and the committee of administration in the operation of the college and to form policy in matters pertaining to it.

The University of Iceland

The administration of the University of Iceland is in the hands of the University Council, the rector, the chief secretary to the University and the organiser of instruction.

The University Council is the chief administrative body of the University. The rector supervises the daily administration of the University and he is responsible for executing whatever policy has been adopted. He is elected from the body of University professors for a period of three years.

3. FINANCE

Expenditure on education and cultural affairs from 1970 to 1984

The Ministry of Education comes second if one uses expenditure as a yardstick. Only the Ministry of Health has a larger budget. About one-third of all institutions and projects that are included in the budget come under the Ministry of Education.

The total expenditure of the Ministry of Education has almost doubled in the period 1970-1984. If a comparison is made between the expenditure of the Ministry of Education and the Gross National Product, one can see that the expenditure of the Ministry has increased more than GNP. In 1970 the expenditure of the Ministry of Education was 3.88 per cent and in 1984 it was 4.13 per cent of GNP.

The expenditure of the Ministry of Education as a percentage of the total State's expenditure has been between 15 and 18 per cent from 1970 to 1984 and is on the decrease. The highest amount was 17.7 per cent in 1970 and the lowest 15.5 per cent in 1984. This decrease does not mean that the expenditure of the Ministry of Education has really decreased during this period; it is other state-funded operations which have increased relatively more.

Expenditure on schools from 1970 to 1984

The greatest expenditure of the Ministry of Education is on schools. In 1984, 70.4 per cent of the total expenditure of the Ministry was spent on schools and the largest amount, 37.9 per cent, was spent on primary schools. If the expenditure is broken down according to the type of cost, it appears that salaries are the largest part of the expenditure on schools, on average 76.2 per cent.

The proportion the State and the local communities pay towards the administration and the initial costs of schools varies according to school type. The State pays all teachers' salaries in all types of school with the exception of music schools. The State also pays all other salaries, but in the form of contributions which are dependent on the number of students and departments in the school.

Contributions to developmental work in schools

Every year some funds are allotted in the budget towards developmental projects in the field of education, mainly at the primary level and also for the writing of materials and the publication of educational and teaching materials for primary school. In the period 1970-1984, this varied from 0.05 to 0.07 per cent of GNP.

Student loans and student grants

The Icelandic Student Loan Fund supports students at the university level and in various special studies both in Iceland and abroad, by granting them long-term loans. The amount of the loan depends, among other things, upon where the student is studying and the student's income as most Icelandic students have the possibility of getting a paid job in the summer.

The Student Loan Fund is financed by the State Exchequer with a sum that is determined every year in the budget. It also receives some money from repayments of older loans. Contributions to the Fund have been increasing and it is now able to lend what the student needs so that he can finance himself during the time of his study. In the years between 1970 and 1984 the contributions to the Fund have increased from 0.2 to 0.9 per cent of GNP.

Teachers' unions

There are two teachers' unions: the Icelandic Federation of Teachers and the Icelandic Teachers' Union. In the former there are mainly primary school teachers and teachers at the secondary level without university training.

Members of the Icelandic Teachers' Union are secondary school teachers who have completed a university degree, and some primary teachers who have completed their training at the University College of Education.

Recently the unions formed the Teachers Association and have agreed to merge in the near future.

The salaries of teachers, as well as other groups in society, have been greatly debated recently, mainly because in the past few years their purchasing power has been decreasing. The teachers' unions have also maintained that the development of teachers salaries has been very unfavourable in comparison to other professions. This, among other things, has made it more difficult to recruit fully qualified teachers. Many have left the profession to take other and better paid jobs. This is particularly true of science teachers.

What characterizes the labour market is that most groups work many hours overtime and consider it necessary in order to make ends meet. In the period from 1980 to 1984 primary teachers did 14 to 18 per cent overtime, secondary teachers 23 to 31 per cent compared with 48 to 55 per cent by the unskilled workers.

4. PRIVATE SCHOOLS

Law No. 63/1974 states the following about private schools. "The Ministry of Education will allow the creation of primary schools financed by private individuals or institutions provided that they operate within the framework of a set of rules or a charter and be subject to the same supervision and rules as other primary schools. Teachers at such schools are to have the same qualifications as those demanded of teachers at the public primary school. Private schools have no claims to public support."

There are few private schools in Iceland. In the academic year 1985-86 there were five private primary schools with a total of 450 pupils. At the secondary level there were two independent schools of commerce, both privately owned, with a total of 850 students.

One school in Iceland, the Skàlholt Academy, operates in the spirit of the Scandinavian public academies.

5. ENROLMENT

Primary school

The size of each age group is between 4 000 and 4 500. According to the 1974 law on primary school, there are nine years of compulsory education. However, that stipulation has only been enforced since academic year 1985-86. Up to that time compulsory education was eight years. But since it was necessary for students to complete form 9 in order to be able to proceed to secondary school, in fact over 90 per cent of them continued their studies in form 9. Enrolment in form 9 was on average 2 to 5 per cent greater in Reykjavik and vicinity than in rural areas. Many students left school after form 8 in sparsely-populated fishing villages, but some of them continued their education later on.

Secondary schools

Ever since the end of the second world war, enrolment in secondary schools has grown steadily. In school year 1945-46, some 1 500 students (1.2 per cent of the population) were enrolled in secondary schools compared with 15 500 students (6.4 per cent of the population) in school year 1984-85. During this period of time, the number of schools had increased, as well as the courses available, in particular in the last decade.

Those who complete primary school must meet certain minimum standards in order to continue their education without delay. In recent years, over 60 per cent of each age cohort have met these demands. The number of students enrolled in secondary schools is now close to 70 per cent of each cohort.

Since 1979 the enrolment in secondary schools increased, mainly among students between the ages of 16 and 19. However, there was no increase in the number of students 20 years or older seeking secondary education during the same period of time.

There is a difference of 15 to 20 per cent in enrolment in secondary schools between rural and urban areas. However the relative increase has been similar in both areas.

An examination of enrolment in recent years reveals an increase for both sexes, particularly for boys in the first two years of secondary education, but in all four years for girls. A considerably greater number of girls start secondary school but their drop-out rate is much greater than that of boys.

In regard to enrolment in specific fields of study, it seems that the number of students in the area of technical education is decreasing, whereas in social services and commerce, it is increasing. The difference between rural areas and urban areas in this respect is negligible.

Higher education

Enrolment in higher education increased at the same pace as in secondary education. In school year 1945-46 there were 320 students enrolled in the University but in 1984-85 they were 4 500.

When comparing the enrolment at the university level of students from urban and rural areas, it is clear that almost two-thirds of all students come from urban areas.

If one compares the enrolment of men and women at the university level, the difference between the sexes was negligible in recent years. In 1979 men outnumbered women by about 2.5 per cent but in 1984 the difference was just over 0.5 per cent. Many university students go abroad every year to study. In 1984-85 there were about 2 200 students studying in other countries. Little more than one half in the Scandinavian countries, about one-fourth in the United States.

6. EDUCATIONAL OPPORTUNITIES

Pre-school education

The education and upbringing of children who have not reached compulsory school age can be of two kinds: *a)* day-care centres for ages 0 to 6 and *b)* pre-school classes for 6-year-old children or 5- and 6-year-olds.

Day-care centres are intended to give children an opportunity to be guided by people specially trained in matters of upbringing, and to provide them with the best possible conditions for growing up so that they benefit personnally and socially. Most primary schools in the country have pre-school classes where emphasis is placed on preparing the child for the regular course at primary school.

Primary education

According to the Law on primary education the main aims are:

> "In cooperation with the home, the school must prepare children for life in a modern democratic society..."
>
> "The school must work to meet the demands and needs of the child and give each individual an opportunity to develop intellectually and physically."
>
> "The school must enable the child to gain knowledge and develop skills and methods of work in a constant effort to gain mental and physical maturity..."

In accordance with these aims, instruction in all forms is related to realistic observations and worthwhile activities. In form 9 the students have some choice of subjects and special emphasis is placed on practical education.

The Ministry of Education publishes a curriculum for the primary school, which deals with the following:

a) practice in Icelandic, both spoken and written, and instruction about Icelandic literature,
b) basic instruction in mathematics,
c) the development of the child's aesthetic sense, artistic leanings, and dexterity,
d) instruction on human society, the history of Iceland, the history of the world and geography,

e) instruction in Christianity, ethics and knowledge of other main religions,
f) instruction in the effects of using alcohol and other addictive substances,
g) instruction about the material world, ecology, physics and chemistry,
h) instruction in foreign languages,
i) home economics,
j) physical education and instruction in health,
k) practical education,
l) various electives.

Secondary education

There are few curricula for secondary schools published by the Ministry. However, there are clauses in most of the laws and ordinances on individual schools or school types that stipulate the role of the school and the aim of specific school subjects.

Secondary colleges

Secondary colleges were, for a long period of time, the only schools that had the right to matriculate students. Other schools, which have since been granted the right to matriculate students, have based their programme and teaching on the secondary college model.

The course is divided into mandatory subjects, elected fields and electives.

Mandatory subjects are those that students have to take whatever course of study they decide on.

The elected field is the basis of the division into departments in the school. They are groups of related subjects and each student is to select one such group. Electives are all other subjects that a student takes and cannot be included in the first two categories.

Commercial education

The initial commercial education is a two-year course which prepares students for a general occupation in the field of business and commerce. The students may add one more year of study which prepares them for a more specific occupation in commerce. Those students who have completed the two-year course and the three-year course may continue their education towards matriculation (a total of four years).

Training for the health service

Training for work in the Health Service takes place both at the secondary and the university level. The largest group of people, i.e. nurses and nursing aids, until recently received their training at the secondary level. In 1984 it was decided that all nurses should be trained at university level.

Vocational and technical education

The role of the council of vocational education includes preparing and publishing curricula for vocational training with the approval of the Ministry of Education.

Those who go in for vocational training have different routes to choose from. In the first place the student can make a contract with a master or a company of masters. The master sees to all practical instruction in the subject, whereas the theoretical aspect of the subject is provided by the vocational school.

Secondly, the student can enroll at a trade school, or department, in connection with other vocational schools or secondary comprehensive schools. For the time being there are six such departments in operation: in metalwork, woodwork, hairdressing, electricity, bookbinding and tailoring. The course takes one year and is divided equally between theory and practice. Those who complete trade school can go on to make a contract with a master or they can continue their education in departments for advanced students at the trade schools.

Secondary comprehensive schools

In the past ten years a number of secondary comprehensive schools have been set up. They offer a more varied course of study than other schools. The number of courses offered covers that which is offered by the secondary colleges and in many cases by what is offered in vocational and specialised schools. These schools have tried to relate their work with life and work outside school as well as to cooperate with specific industrial firms in order to create courses that will be practical to the students later on.

Higher education

The University of Iceland

Courses at the University of Iceland vary greatly in regard to flexibility of choice and time limits that are set. The University is divided into the following faculties: Theology, Medicine, Law, Economics, Philosophy, Science and Engineering, Dentistry, Social Sciences.

The University College of Education

The University College of Education offers a three-year course for those who want to qualify as teachers at the pre-school and primary school level.

The Technical College of Iceland

The College is divided into two departments, one of general education and one of specialised education. Courses in the department of general education lead to a qualification in science, which enables the students to continue training at the University.

The department of specialised education is subdivided into three sub-departments, i.e. construction, electricity and mechanics.

7. INSTRUCTION, ASSESSMENT AND TEACHING AIDS

Primary school

The curricula are issued by the Ministry of Education and prepared on behalf of the Ministry mainly by practising teachers and specialists in the field of education. The curricula are, first and foremost, to serve, guide and direct teachers but not to give them binding orders.

Directors of education, who work for the Ministry of Education, assist schools on problems of all kinds which may occur in connection with work at school.

Up to the mid-seventies, pupils of the same age were put in forms most often according to ability. After the Law No. 63/1974 was passed pupils were no longer streamed but the form continued to be the basic unit although it now became composed of pupils with mixed abilities.

Over the past few years many schools have tried to break away from this rigid form system and have adopted a different structure based on the open-plan system. Those aspects of the school which are most often mentioned, and in fact emphasized in connection with open-plan schools, are the following:

1. Education is related to the student's knowledge of the world.
2. Emphasis is placed on independent work.
3. Attempts are made to provide a warm and stimulating environment in the classroom.
4. The role of the teacher is first and foremost to organise, assist and guide the students rather than pass on information.

At the in-service courses for teachers great emphasis has been placed on the need for flexibility to meet different circumstances.

Assessment is an important part of school work. It is dealt with extensively in the Law on primary school No. 63/1974 and in ordinances on the same subject. The purpose of assessment at primary school is:

a) To provide teachers and students with information on various aspects of their work which can then be used as a guide in further planning of the course;

b) To provide teachers, parents, and others concerned with information on the student's progress at school.

Assessment is carried out by the schools and by the education authorities.

Every year the education authorities hold national primary school examinations at the end of form 9, the aim of which is:

a) To provide schools with the results of the examinations nation-wide or in specific areas so as to compare their students' results with those of larger groups;

b) To provide secondary schools with their future students' achievement in addition to the evaluation given by the primary school.

At the end of primary school each pupil has to take a national examination in Icelandic, Mathematics, Danish and English.

Teaching materials

According to the law, pupils at the compulsory stage of their education are to be provided with free teaching materials, while at later stages of education the students are required to meet these costs. Due to the size of the community and the small market, the selection of educational and teaching materials is limited.

The National Centre for Educational Materials was set up in 1979 under the auspices of the Ministry of Education. The role of the Centre is to provide primary schools with the best possible educational and teaching materials. Its operating cost is paid by the Treasury and the Centre's own profits.

Secondary schools

To begin studies at a secondary school, a student must have completed his compulsory education with satisfactory results as defined by the Ministry of Education. Those students who do not meet the requirements have the option of going into preparatory classes which are to be found in most general secondary schools in order to improve their standard in basic subjects.

The Ministry of Education has not issued curricula for secondary schools, nor has comparable developmental work to that at the primary level been carried out. Currently, however, curricula for secondary comprehensive schools are being prepared on the initiative of the Ministry of Education.

Legislation concerning certain types of school sometimes stipulates what subjects should be taught but the more detailed planning has been left to the schools themselves. Curricula have, however, been issued for most trades and they have been authorized by the Ministry.

Up to the end of the last decade all secondary schools operated on the traditional form system but in the last few years the unit-credit system has been adopted by most secondary schools.

There is a great shortage of good teaching materials for secondary schools which creates various problems, partly due to the great variety of subjects offered and the groups of students being often very small. Teachers have tried to solve this problem either by using foreign textbooks written in one of the Scandinavian languages or in English, or by writing their own material.

8. TEACHER TRAINING

Primary school teachers

The Law No. 51/1978 concerning the basic qualifications required of teachers and head masters at primary and secondary levels specifies the requirements that a teacher has to meet to qualify for appointment at the pre-school, primary and secondary levels.

According to the law, all teachers must have completed one year of education and training in their respective subjects. Their training differs according to level and type of school.

There are two main institutions which provide teacher training: the University of Iceland and the University College of Education. The Art College of Iceland, the Academy of Music in Reykjavik and the Physical Education College of Iceland provide teacher training respectively in art, crafts, music and physical education.

Matriculation qualifications are a prerequisite for entrance into the University College of Education. Students qualifying from the College can teach at pre-school and compulsory school levels. Education at the University College of Education takes three years and students graduate with a B.Ed. In recent years between 120 and 130 students have been admitted each year, but many more had applied.

About 80 per cent of those enrolled in the College of Education are women.

At the Art College and the Academy of Music there are special departments to train teachers in art, crafts and music for the primary and secondary levels. The Physical Training College of Iceland trains teachers for both primary and secondary levels.

Secondary school teachers

The University of Iceland trains teachers in the various academic subjects offered at the secondary level, including a general course in education. Teachers of academic subjects must have a university degree in their respective specialty as well as a diploma in education. This training takes at least four years, one of which is devoted to pedagogy.

Vocational school teachers

Teachers at vocational and technical colleges are supposed to have completed specialist education to qualify in their respective fields and in addition they are required to have some practical experience. These teachers also have to complete a course in education at a teacher training institution.

In-service training of teachers

Improving the quality of education has been greatly stressed over the last two decades. As part of this effort much attention has been given to the in-service training of teachers provided by the University College of Education. On average, about 23 per cent of all primary school teachers attend these courses every year, where they are introduced to new teaching methods and learning aids and their application, and to innovative educational practices.

Funds are allocated yearly for the in-service training of teachers at the secondary level. The Teachers Association at the secondary level makes proposals to the Ministry of Education as to the allocation of these funds. About 20 per cent of the secondary school teachers attend in-service training courses every year.

Development in teacher training

Recruiting fully-qualified teachers to work in the various schools has at times been problematic. The number of qualified teachers graduating from the University College of Education is quite large; however, each year part of that group seeks other employment. The proportion of teachers without full qualifications is higher in rural areas than in towns and cities.

At the secondary school level there is a sufficient supply of teachers in some of the subjects, for example in foreign languages and social studies, but it is increasingly difficult to recruit maths and science teachers.

9. ADULT EDUCATION

Adult education is carried out by various organisations but there is no specific legislation that deals with this sector of education. The term adult education is used here for all education and cultural activities that involve adults.

In the last decade, adult education departments were set up in various secondary colleges and secondary comprehensive schools with a view to giving adults the opportunity of following a course of study leading to matriculation. The only entrance qualification is that the student be twenty-one years old. The courses are financed by the students, the local communities and the State.

Vocational training schools have been quite active in offering people at work courses which are directly related to their jobs. These courses are often organised in cooperation with the firms in question or the employees association.

The Centre of Industrial Education was established in 1981 in order to strengthen in-service training for those who are working in the various industries. It analyses the needs for special training and prepares and runs courses in cooperation with different institutions.

Adult education centres operate in various parts of the country and are responsible for comprehensive educational activities. The students can take courses in a great variety of subjects. These centres are administered by the local communities and receive a small annual grant from the State.

Iceland has one Correspondence School which is run by several associations in the country, aided by a grant from the State.

10. POLICY-MAKING AND SCHOOL DEVELOPMENT FROM 1965 to 1986

Until the early 1960s school affairs in Iceland were relatively stagnant. It became clear that the schools were no longer meeting the demands made on them and were no longer in harmony with various aspects of society. Materials were obsolete and teaching methods did not compare favourably with the best education and teaching.

During these years a great debate about school matters arose and loud demands were made for change. The enrolment of students at secondary schools grew considerably so that the system had problems in coping with it. As a result of these times of turmoil most laws pertaining to schools were revised or new laws were written at the end of the sixties and the beginning of the seventies. A revision of the laws on secondary schools was not followed up by changes in the content of education, the organisation of teaching and teaching methods and, as a result, the improvements that were being aimed at have only been realised to a limited extent. This part of the school system and its problems are still very controversial. New laws on primary school were passed in 1974, and followed up with much developmental work, both in formal organisation and practice within the schools. As a result this stage of the school system is now doing relatively well, although improvements can always be made and are being made.

As regards policy-making in educational affairs, a great number of people are involved and it is not always easy to realise how some decisions are made. In that respect, the authorities have an important role and so have heads of schools, teachers and others who are connected with school work. All these parties have, one way or another, affected the laws and ordinances that have been passed on educational matters. Parliament is responsible for passing laws and for policy-making in educational affairs for the country as a whole. The executive branch of government then passes ordinances where these policies, decided upon by the Icelandic Parliament, have to be more clearly specified and explained.

Pre-schooling

In 1979 the Ministry of Education appointed a committee to study the problems of pre-school education, formulate policy and make recommendations for the future. The committee was to advise on the needs of children of pre-school age in regard to:

- The maturation and developmental needs of the 6-year-old.
- The possibility of providing more equal opportunities for early education and success before the start of regular school.
- Changes in society over recent decades.

The committee submitted its proposals at the end of 1981 and since then some of these have already been put into practice and others are being worked on.

Primary school

In the Law No. 63/1974 on primary education several innovations were proposed, the most important of which are:

1. To enable all children and adolescents in the country to have equal opportunities for education by, among other things, lengthening compulsory education and lengthening the school year.
2. The State and local communities were to establish counselling and psychiatric guidance in the primary school.
3. The country was divided into eight educational regions and some of the power of the Ministry of Education was delegated to them.
4. The laws contained clauses on school research and minimum funds were set aside for such work.
5. It became possible to grant sabbaticals to teachers after five years of employment.
6. Libraries were to be established at all primary schools.

Most of these changes have already been executed to a lesser or greater extent.

In 1966 the Department of Research and Development was established at the Ministry of Education. This was the beginning of focused work on development in regard to primary school and this has continued ever since. It was decided to concentrate first on the revision of teaching materials and then try through these to effect changes in methods.

At the same time the Department began to work on the planning of curricula for the primary school. This work was hampered by all kinds of difficulties, mainly through lack of qualified people with expert knowledge in the field of education. In order to improve matters courses were held for people concerned with curriculum planning.

The curricula are issued in two parts: the general school curriculum, containing more particular specification of the general articles of law, especially the primary school law describing general educational policy; and curricula for each school subject or groups of subjects. A special curriculum is in preparation for the first forms not relating to special subjects.

Planning curricula is a new development in Iceland. In 1960 the first curriculum was issued for compulsory school. It contained a short statement describing the general aims and the materials to be used for each age group.

The last ten to fifteen years have been a period of growth for education in Iceland. The organisation of the primary school and the content of education have been radically changed in a relatively short time. There are more doubts about teaching methods, and there are instances where original expectations about changes in school organisation following new teaching material have not been realised as quickly and definitely as hoped by many.

During this period, all these important changes were the responsibility of the Ministry of Education, in particular the Department of Educational Research and Development, i.e.

policy-making, planning of curricula, decision-making, innovation, production of materials and teachers' guides, in-service training, and evaluation. It should also be remembered that among such a small population, specialists are not available in every field. A single person is therefore responsible for the whole process, from policy-making until the changes are firmly achieved.

During the last few years this situation has changed. More and more of the affairs previously in the hands of the Department have been transferred to other institutions. In-service training became the responsibility of the University College of Education in the early 1970s.

The production of teaching material is now the responsibility of the National Centre for Educational Materials. The directors' former activity of writing material and revising work will now consist of counselling and making proposals based on evaluation and surveys.

Secondary schools

Up to 1970 secondary education offered a rather limited curriculum. The main schools were secondary colleges and vocational schools. Secondary colleges prepared students for University and vocational schools served specific needs of the economy, and aims were defined in accordance with these needs. Special laws applied to each school or type of school which specified entrance qualifications, subjects, exams and rights on completion of study.

The mid-sixties saw such an increased demand for secondary education that the schools that were then operating could not meet it. To solve this problem, continuation classes were set up in some of the primary schools. The courses, which lasted one or two years, prepared students for continuing education in special schools and also prepared them for certain occupations.

In 1973 Parliament passed laws that gave the local communities the authority to set up secondary comprehensive schools. The courses that were offered in these schools were much more varied than before and the students were given many more options than hitherto.

Secondary education has been much debated in recent years. Shortly after the laws on primary school had been passed in 1974, preparation started for a comprehensive legislation for secondary school. The policy that had been formed with laws on primary school led, among other things, to the necessity of revaluating several aspects of secondary education, in particular the link between primary and secondary school. As a result a Bill covering secondary school was submitted in 1976 to Parliament. The Bill was not discussed during that session and has, in fact, been submitted several times since, but was never passed. Nonetheless, the Bill and the ideas it expresses have had considerable influence on the development of secondary school in recent years, mainly in the sense that all the secondary comprehensive schools that are now in operation, as well as other schools that work under the same system, based their programme to a lesser or greater extent on the ideas and proposals that the Bill contains.

11. CURRENT ISSUES

Different branches of the education system are now being developed or are under observation. The following can be mentioned:

1. New legislation for secondary education is under preparation and the Law No. 63/1974 on primary education is being revised. Emphasis will be placed on the role of the State and of the municipalities in financing schools.
2. An effort is being made to improve co-operation between the home and the school, and between the school and the workplace.
3. The possibilities of distance learning are being investigated.
4. It is important to revise the organisation and in some cases the content of teacher education and improve the status of the teaching profession. This matter is now being discussed between the Ministry of Education and Teachers' Unions.

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